

Industrial

# Standardization

and Commercial Standards Only

20¢

Concentration of Industry  
to Be Based on Standards  
(See Article on Page 241)

October  
1942

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*Reg. in U.S. Pat. Off.*

**Standardization is dynamic, not static. It means  
not to stand still, but to move forward together.**

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Office at New York, N. Y., under the Act of March 3, 1879.

## "ASA Service Helps on War Orders"

"THIS letter is being written to inform you that the service given us by you on our orders during the past few months is really sincerely appreciated.

"Without a doubt, the shipments you have been giving us would be considered 'unusual' in ordinary times. In these war times, when everyone is working to capacity and order back-logs are filled to overflowing, the delivery you are giving in many instances is nothing short of a 'miracle'.

"Your splendid work has enabled us to complete one Army contract on time and be started well into another."

—From the Taylorcraft Aviation Company.



# Concentration of Industry To Be Based on Standards

by P. G. Agnew

*Secretary, American Standards Association*

**A**PPROVAL by the War Production Board of an intensive program of "concentration of production" promises to result in one of the most far-reaching adjustments ever experienced by American industry, with standards and simplification as one of the key factors in the program.

To carry out this "concentration" program, the WPB is expected soon to issue orders limiting production of many civilian goods to a selected number of small plants. These will be permitted to manufacture only greatly simplified lines—each model stripped of all gadgets and designed to be produced with the least possible use of strategic materials and production facilities.

In this the WPB is being guided by the experience of the British who have had a similar program under development since early 1941.<sup>1</sup> One of the first steps was to send representatives to England for a first-hand study of their experience, although a start in that direction had already been taken by WPB in the case of gas stoves and bicycles.

## Utilizes Production Facilities

The purpose of the new program is, of course, to make the most efficient use of production facilities, manpower, materials, and transportation for winning the war. The nucleus plants that continue operation are able to operate at a very high load factor. The British have found it possible to largely eliminate cross-hauling. And the whole process of distribution can be carried out much more economically.

<sup>1</sup>The following British industries have been concentrated, or are in process of concentration: Bedding, bicycles, boots and shoes, suspenders, carpets, corsets, cutlery and razor blades, fountain pens, gloves, hosiery, jewelry, leather goods, linoleum, musical instruments, paper boxes, photography, pianos, pottery, sports goods, toilet preparations, toys, umbrellas, iron and steel, glazed tiles, woodworking, jute, silk, wool, cotton and rayon, paper mills and feltmongery. The British government is taking the responsibility of determining which firms are to cease production and also the methods of preserving trademarks and goodwill, and providing for the physical care and maintenance of closed plants. Compensation is provided for closed plants.

The impact of the program on industry and on the civilian population is bound to be very great. The Associated Press has estimated that 60,000 of the country's 180,000 manufacturing plants will be affected. It seems likely that the resulting "utility" models and sharp reductions in the variety of goods available will bring the war closer to every family.

## Minimum Standards Are Necessary

The WPB recognizes that standards and simplification are basic to the whole concentration program. This calls for the elimination of luxury lines at the top, and of unnecessary varieties, types, sizes, and colors of commodities. On the other hand, true economy requires that wasteful deterioration of quality to uneconomic levels be prevented. Further, in such a program, minimum standards of quality and performance are necessary for the protection of the public, including the health, well-being, and safety of the civilian population.

The typical standard for the purpose will define either a "utility" model (a stripped model of the product originally produced by the nucleus plant) or a "Victory" or "War" model (a uniform product to be produced by all nucleus plants in a specific industry).

There has been a good deal of discussion as to whether the concentration of production program shall be built around "utility" models or "War" models. Probably no decision can be made except after a study of each individual product. Each has its advantages and disadvantages. If a single "War" model can be produced without retooling by the nucleus factories, and if particular materials are available in sufficient quantities the "War" model would probably be the most economical. If, however, each factory is permitted to make a stripped "utility" model of the product which it is already tooled up to produce, it will obviously be able to get into production more rapidly, and economically. "Utility" models produced in different plants may call for slightly different materials which would also have the effect of relieving some of the pressure on the materials

used. Great Britain's experience has indicated that the best results can usually be obtained through production of the "utility" model.

The British Standards Institution has developed such emergency standards for the British Government for women's dresses and underwear; women's and children's boots and shoes; japanned, galvanized, and enamelled hollow-ware; overalls; cotton and rayon cloths; and other commodities.

### **New Standards Will Be Essential**

In most cases, new standards will have to be set up cutting down the weight of materials in the model to be produced, specifying substitute materials, and eliminating all frills. In any event, standards specifying the minimum quality performance are essential.

Such standards were included when the War Production Board first issued its order limiting production of gas stoves to a "utility" model, (American War Standard Requirements for Gas Ranges). For some reason which it is difficult to understand, however, the essential clause in the gas stove order has been cancelled by the legal division of WPB. This leaves the consuming public without protection. Furthermore, the action ignores one of the basic principles of the concentration of industry, viz., that wasteful deterioration of quality to uneconomic levels must be prevented, and the health and well-being of the civilian population provided for. It is understood that this action of the legal division is being re-examined and that the performance standard will probably be re-instated in the gas stove order in some form.

One of the interesting questions arising in this new concentration program is that of trademarks. Many companies have over many years, and at great expense, built up recognition of their trade-marked product. Those plants which are converted to war production or are refused permission to produce their product because of scarce materials will have to stand by and see their markets taken over by the "utility" or "War" models produced in the nucleus plants which are permitted to continue in production. As a matter of fact, the nucleus plants themselves face similar problems.

### **Britain Protects Trademarks**

In order that these companies need not be forced to sacrifice the good will and recognition which they have built up at great cost, some of the solutions to this problem which have been tried in Great Britain are being studied here. When production of the entire product is concentrated in the hands of a few British companies, one solution is for all those companies which are no longer making the product to be permitted to place their trademarks on certain percentages of the goods produced by the nucleus companies. The product being manufactured by

these nucleus companies, however, is a "stripped" model minus all gadgets and frills. In some cases, companies which have become known as manufacturers of luxury or exclusive models prefer not to have their trademarks used or to become associated with the war-time model being produced by the nucleus company.

Mr. Nelson has appointed a Committee on the Concentration of Production under the chairmanship of Joseph L. Wiener, active head of the Office of Civilian Supply. It is understood that a small subcommittee on standardization and simplification has been set up consisting of:

Howard Coonley, Conservation Division, Chairman

Dexter Keezer, W. S. MacLeod Alternate, OPA  
Edward F. Addiss, Division of Civilian Supply

Further, the plan is that this subcommittee will appoint a special project committee for each industry whose production is to be concentrated, consisting of one man each from the Divisions of Conservation, Civilian Supply, Industrial Branches, and one from the Office of Price Administration.

### **Industries to Be Concentrated**

It is understood that work is already under way looking to concentration in the following industries:

Farm machinery  
Paper  
Warm air furnances  
Wood furniture  
Dairy machinery  
Soil pipe

Mr. Coonley, chairman of the small subcommittee on standardization and simplification, is former president of the National Association of Manufacturers and former president of the American Standards Association. He now heads up the standardization and simplification work of the War Production Board, as Deputy Chief of the Bureau of Industrial Conservation. Dr. Keezer is Deputy Administrator of the Office of Price Administration and Mr. MacLeod, his alternate on the subcommittee, is Chief of Technical Operations of the Standards Division of the Office of Price Administration. Mr. Addiss heads the standards activities for the Division of Civilian Supply.

### **Heads Supply Ministry**

The British Standards Institution announces that the chairman of the BSI Screw Threads Committee is now Director of Gauges of the British Ministry of Supply. The new American Standard for Screw Thread Gages (B1.2-1941) has been called to his attention by the Director of the BSI.



*British Combine Photos, Ltd.*

A scene in Bath, England, after a German raid.

## Great Britain Organizes For Post-War Building

British representative visits United States to study American methods; arranges with ASA and other organizations for interchange of data

A COMPREHENSIVE program of research and development in the entire building field is already under way as the first part of the program for post-war rebuilding of British cities and towns. In connection with this program, Sir Ernest Simon, representative of the Ministry of Works and Planning, is now in the United States rounding up information in regard to research and standardization in the housing field and arranging for the systematic interchange of information on such work between Great Britain and this country. Sir Ernest has made arrangements with the American Standards Association for an informal interchange of data, through which ASA committees in the building field will be kept informed of the results of the British work and will be asked to criticize it.

To carry out the necessary research and development, and to coordinate similar work which has been going forward in a large number of professional organizations and trade associations in Great Britain, the Ministry of Works and Planning has set up a series of study committees. Apparently the plan is that these committees will study the entire mosaic of housing to determine where data on good practice is either confused or lacking, and will then carry out research to fill these gaps. The information collected and codified will then be made available to the building industry in Great Britain in a clear and understandable form.

Twenty-two committees have already been recognized by the Ministry. Eleven of these have

*(Continued on page 246)*

# How the British Have Organized Their Study of Post-War Building

THE British organization to make plans for post-war building heads up in the Directorate of Post-War Building of the Ministry of Works and Planning. A small secretariat has been appointed to take care of the actual work. An Installations Policy Committee, a Structure Policy Committee, and a Design Policy Committee report to this secretariat.

The study committees carrying on research and development in the building field report to the three policy committees as shown in the list below.

The British set-up includes a committee on Codes and Practices whose functions seem to be similar to the ASA Building Code Correlating Committee, which plans, supervises, and correlates the work of the various ASA committees dealing with building code matters. Materials specifications, dimensional specifications, and

methods of test, in the British set-up, will be prepared by a Standards Committee. The work of these committees will be cleared through the British Standards Institution.

Committees of the American Standards Association which are working on comparable building problems, and which will be kept in touch with the British work through the new liaison arrangement, just completed, are also listed below. To make the American picture a little more concrete, a partial list of standards in the fields of these committees has been added in parentheses and in smaller type. No attempt has been made to include a large number of American Standard materials specifications and methods of test developed through the American Society for Testing Materials and other organizations.

## British Committees Reporting to the Design Policy Committee

Design of Houses and Flats  
Design of Houses and Flats for Scotland  
Committee on House Construction  
School Planning Group  
Business Buildings Committee  
Farm Buildings Committee  
Committee for the Architectural Use of Materials

Acoustics Committee

## British Committees Reporting to the Structures Policy Committee

Steel Structures Committee  
Reinforced Concrete Structures Committee  
Timber Structures Committee

Walls, Floors, and Roofs Committee

Committee for Fire-Grading of Buildings

## ASA Committee Nearest In Scope

{ Acoustical Measurements and Terminology—Z24  
(Acoustical Terminology—Z24.1-1942  
Noise Measurement—Z24.2-1942)

## ASA Committee Nearest In Scope

{ Building Code Requirements for Iron and Steel  
—A57

{ Building Code Requirements for Wood—A61

{ Specifications for Plastering—A42  
(Specifications for Gypsum Plastering, Including Requirements for Lathing and Furring—A42.1-1942)

{ Floor and Wall Openings—A12  
(Safety Code for Floor and Wall Openings, Railings, and Toe Boards—A12-1932)

{ Walkway Surfaces, Safety—A22

{ Building Code Requirements for Fire Protection and Fire Resistance—A51

{ Fire Tests for Building Construction and Materials—A2

(Methods of Fire Tests of Building Construction and Materials—A2.1-1942

Methods of Fire Tests of Door Assemblies—A2.2-1942)



**British Committees Reporting to the  
Installations Policy Committee**

**ASA Committee Nearest  
In Scope**

Lighting Committee

- { School Lighting—A23  
(Standards of School Lighting—A23-1938)
- { Industrial Lighting—A11  
(Industrial Lighting—A11-1942)
- { Building Code Requirements for Light and Ventilation—A53

Heating and Ventilation Committee

- { Chimneys and Heating Appliances—A52
- { Building Code Committee for Light and Ventilation—A53
- { Dimensioning of Furnaces—B50

Mechanical Installations Committee

- { Elevators—A17  
(Safety Code for Elevators, Dumbwaiters, and Escalators—A17.3-1942)
- { Mechanical Refrigeration—B9  
(Safety Code for Mechanical Refrigeration—B9-1939)
- { Refrigerator Standards—B38  
(Code for Testing Domestic Refrigerators—B38c1-1931)

Electrical Installations Committee

- { National Electrical Code—C1  
(National Electrical Code—C1-1940)
- { Electric Ranges—C71
- { Electric Water Heaters—C72
- { Refrigerators—B38

Gas Installations Committee

- { Gas Safety Code—K2  
(Gas Safety Code—K2-1927)
- { Requirements for City Gas—Z27  
(Recommended Practice for the Installation, Maintenance, and Use of Piping and Fittings for City Gas—Z27-1933)
- { Gas-Burning Appliances—Z21  
(Hotel and Restaurant Ranges and Unit Broilers—Z21.3-1940)
- { Domestic Gas Ranges—Z21.1-1940
- { Private Garage Heaters—Z21.4-1932
- { Gas Clothes Dryers—Z21.5-1940
- { Incinerators—Z21.6-1932
- { Installation of Conversion Burners in House Heating and Water Heating Appliances—Z21.8-1940
- { Hot Plates and Laundry Stoves—Z21.9-1940
- { Gas Water Heaters—Z21.10-1941; Z21.10WS-1942
- { Gas Space Heaters—Z21.11-1940
- { Draft Hoods—Z21.12-1937
- { Central Heating Gas Appliances—Z21.13-1940
- { Gas Conversion Burners—Z21.17-1940
- { Refrigerators Using Gas Fuel—Z21.19-1942
- { Automatic Pilots—Z21.20-1940
- { Portable Gas Baking and Roasting Ovens—Z21.28-1941

Plumbing Committee

- { Plumbing—A40  
(Cast-Iron Soil Pipe and Fittings—A40.1-1935)
- { Air Gaps in Plumbing Systems—A40.4-1942)

**ASA Committees for Which British Set-up Has No Committee of Similar Title**

- Coordination of Dimensions of Building Materials and Equipment—A62  
(This Committee is interested in design problems common to most of the British committees listed above.)
- Building Code Requirements for Fire Extinguishing Equipment—A54
- Administrative Requirements for Building Codes—Z55
- Building Code Requirements for Minimum Design Loads in Buildings—A58
- Building Code Requirements for Reinforced Gypsum Concrete—A59  
(Building Code Requirements for Reinforced Gypsum Concrete—A59.1-1941)
- Building Code Requirements for Signs and Outdoor Display Structures—A60
- Safety Code for Portable Steel and Wood Grandstands—Z20  
(Specifications for Portable Steel and Wood Grandstands—Z20.1-1941)

(Continued from page 243)

been organized by Government departments, eight by professional organizations, and three by industrial organizations. Leading representatives of all sections of the industry have joined and are co-operating actively and with enthusiasm in the work of the committees, Sir Ernest reports. The British Standards Institution has a close working relationship with these committees. C. LeMaistre, chairman of the Institution's Executive Committee, is a member of the Main Committee for post-war planning to which the study committees all report; and P. Good, Director of the Institution, is a member of the Standards Committee which is responsible for drafting standards from the reports of the study committees.

So far as possible, the Ministry has left responsibility for the work of the study committees to the organizations which set them up. These organizations consult with the Ministry, appoint members of the committee, and in nearly all cases provide the secretariat.

#### Committees Work Together

It is expected that a great deal of coordination will be necessary between the committees. The Heating and Ventilating Committee, for instance, will make many recommendations affecting such items as flues, size of windows, insulating power of walls, etc. Thus the recommendations of this committee, and also of the Plumbing Committee and the Lighting Committee, will have an important influence on the work of the Committee on the Design of Houses and Flats.

One of the principal purposes of the Ministry will be to make sure that the committees cover the entire field but that their work does not overlap. In order to accomplish this, the Ministry provides a small central secretariat, including technicians, and has organized three committees to determine policy on questions of design, structure, and installations. The central secretariat is consulted by the sponsoring body about the organization of each study committee, the scope of its work, the choice of a chairman, the extent of representation of outside interests, and the form and time of publication of the committee's reports. The Ministry has at least one representative on each study committee, and the chairmen of all the study committees are members of the three policy committees. A main committee under the chairmanship of the Director-General of the Ministry of Works and Planning acts as the final coordinating agency for the entire group of study committees.

It is expected that the work of these committees will move so rapidly that an interim report will be available from each by the end of October. These reports will be circulated as widely as possible for discussion and criticism, and will then be redrafted. It is planned that final reports

may be completed by all or most of the committees by May, 1943. When these final reports are completed they will be published under the auspices of the Ministry as a uniform series of volumes, which for the first time, Sir Ernest says, "will provide something approaching a complete scientific basis for the building industry." The work of the study committees "is the first attempt to have the scientific problems of the building industry studied as a whole, avoiding one-sided and partisan presentation. The aim is to secure that the best brains in the industry shall be brought to collaborate closely with all the interests affected in the study of each important aspect of the industry, so that the reports are likely to be accepted as authoritative."

#### Standards Will Be Drafted

After the reports of the study committees have been completed, a series of standards including specifications, dimensional standards, and methods of test will be drafted. It is expected that every kind of standard applicable to building will be represented, such as minimum standards for consumer requirements and for the performance of materials; standard dimensions and designs intended to increase output, reduce costs, eliminate unnecessary types, and secure interchangeability of units and parts; as well as standard terms and symbols for use in specifications and instructions.

The British Standards Institution is recognized as the organization through which these standards must be welded into a consistent set of national standards which both industry and government can adopt and use. Through the Institution the proposed standards will be circulated to obtain the approval of all concerned. They will then be issued as approved British Standards.

A second series of standards will be Codes of Good Practice. It is planned that these will also be published by the British Standards Institution and it is hoped they will eventually become a national building code. (In Great Britain the legal jurisdiction in such matters is largely centered in the national Government while in the United States it is left primarily in the hands of the city and state governments.)

#### ASA Closely Tied In

As noted above, Sir Ernest Simon has arranged with the American Standards Association for co-operative exchange of information and material between the British committees and a considerable number of the ASA committees. Sir Ernest has made similar arrangements with the National Housing Agency, the National Bureau of Standards, and the American Institute of Architects for cooperative interchange between these organizations and the British committees. This will make available to our committees the new contributions to the building program in research and development work.

**Use of Fire-Tested Construction Materials Helps Control Fires.**

*Courtesy National Fire Protection Assn*



## **Standard Tests Check Fire Resistance Of Building Materials and Doors**

**by Rudolph P. Miller<sup>1</sup>**

*Chairman, ASA Sectional Committee for Fire Tests of Building Construction and Materials*

**T**WO standards for test procedures to determine and rate the fire resistance of structural materials and assemblies have just been approved by the American Standards Association. The first, American Standard Methods of Fire Tests of Building Construction and Materials (ASA A2.1-1942; ASTM C19-41), is a revision of an American Standard which has had a long history and the former edition of which was approved by the ASA in 1934. The second is a new standard and covers Methods of Fire Tests of Door Assemblies (ASA A2.2-1942; ASTM C152-41).<sup>2</sup>

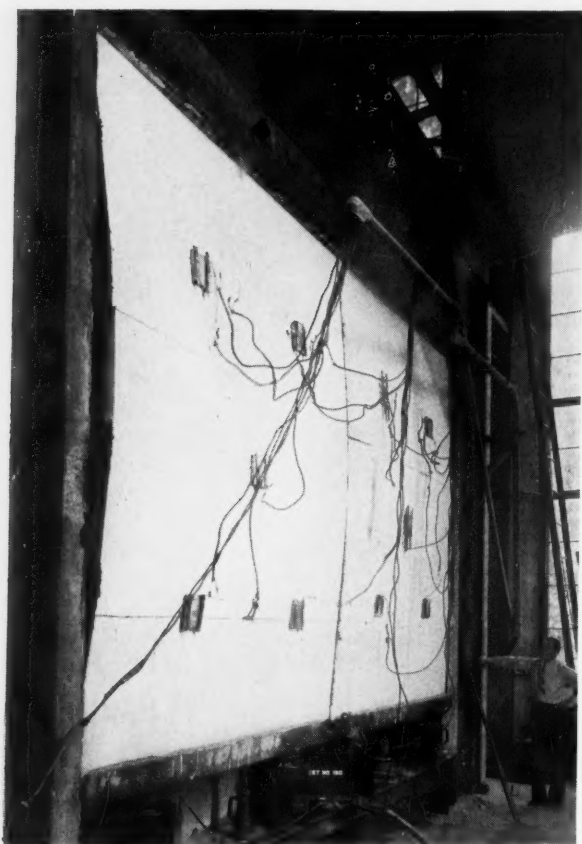
Both standards set up the test procedure in accordance with a definite furnace time-temperature

curve, and prescribe substantially the same procedure, differing only in details of installation of the test sample and the placement of pyrometers or other testing equipment necessitated by the scope or purpose of the test. The conditions of acceptance must of necessity also vary. The ratings are established and expressed in either case as "3-hr.," "1-hr.," "1½-hr.," etc., according to performance in the test.

Although it would have been possible to combine the two standards into one, practical considerations made it desirable to set up separate standards. The older standard (A2.1-1942) applies to tests of structural assemblies in which strength of construction and fire endurance are equally important, such as floors and roofs, walls and partitions, columns, ceilings. The new standard, A2.2-1942, applies to devices whose purpose

<sup>1</sup> Consulting Engineer; Chairman, ASA Building Code Correlating Committee.

<sup>2</sup> These two standards were approved without a dissenting voice by ASA Sectional Committee A2, for which the American Society for Testing Materials, the Fire Protection Group of the American Standards Association, and the National Bureau of Standards are joint sponsors. On recommendation of the ASA Building Code Correlating Committee the standards were approved, also without a dissenting voice, by the ASA Standards Council.



Here a wood stud wall is being tested for fire endurance at the National Bureau of Standards.

is chiefly protection against the spread of fire, strength being more or less incidental.

The development of the standard fire test to its present status as a measure of fire-resistance covers a period of almost half a century and has been one of refinement and greater clarity and definition rather than change in procedure.

It originated in this country in some rather crude tests conducted in 1895 by the building authorities of New York City. A state law prescribed fireproof construction for buildings exceeding certain heights. Floors in that type of construction were to be either "brick or stone arches placed between iron or steel floor beams," provided that arches of over five feet span "may be filled in with sectional hollow brick or hard-burnt clay, porous terra cotta, or some equally good fire-proof material." In the search for the "equally good" construction, the superintendent of buildings required demonstration by a fire test.

When in 1899 the municipal assembly, as authorized by The Greater New York Charter, enacted an ordinance known as the building code, the fire-test of 1895 was incorporated as a condition to the approval as fireproof of any form of floor construction other than those specified in the ordinance.

The precedent established by Superintendent of Buildings Stevenson Constable in 1895, and the later ordinance provision, stimulated considerable activity in the development and testing of fireproof floors; and within ten years more than fifty fire tests on floors were conducted under building department auspices. The building department found it necessary to issue to prospective producers instructions relating to the conduct of tests, in a bulletin entitled "Mode of Procedure for a Standard Fire, Water, and Weight Test on Proposed Forms of Fireproof Floors." In this bulletin the construction of the test structure was outlined, the size of the floor panel to be tested (constituting the roof of the structure) was specified, the load to be supported by the floor during the test was prescribed, the heat to be developed and its determination by pyrometers were explained, the conditions for approval were enumerated, and hints and directions for effective procedure were included. In the earlier tests a five-hour exposure at an average temperature of 1,700 Fahrenheit was demanded; in the later tests (under the ordinance) the time was reduced to four hours.

#### Panels Tested

Though not authorized by law, which with respect to interior partitions in fireproof construction simply prescribed that "no woodwork or other inflammable material shall be used in any of the partitions, . . . ." (other than doors, windows, trim), a similar mode of procedure for fire and water tests on partitions and shaft enclosures was promulgated. The construction to be tested, a panel fourteen and one-half feet long by nine and one-half feet high constituting one side of the test structure, was to "be subjected to a continuous heat from a wood fire for at least one hour" maintaining an average temperature of at least 1,700 Fahrenheit during the last half hour of the test.

On May 24, 1905, under the auspices of the American Society for Testing Materials, Committee P on Fireproofing Materials was organized with the late Ira H. Woolson of the School of Mines, Columbia University, as chairman and with the following membership: W. W. Ewing, John R. Freeman, H. W. Hodge, C. W. Somerville, Edwin Thacher, D. E. Waid, and Rudolph P. Miller as secretary. In its report at the annual meeting of the ASTM in June 1906, this committee, having studied all available data on tests of floors, submitted a test procedure for fireproof floor construction practically following the requirements of New York City. After extended discussion at that same meeting and publication for a year, to solicit criticism, the standard was adopted on September 1, 1907, by letter ballot. A year later a fire test for fireproof partition construction, also based on the New York City regulation but extending the duration from one hour to two hours, was outlined by the commit-



tee. This procedure became an ASTM standard on August 16, 1909.

The two ASTM standards continued as the only guide to the building authorities for some years to come and the activities of Committee P, which in the meantime had become Committee C-5, lay dormant. But as time went on the indefiniteness and crudity of the test procedure became more and more apparent. The information derived from tests made according to the standards was, for practical purposes, helpful to building authorities in demonstrating that certain floor constructions would resist destruction by fire for the four-hour period that had been generally accepted as the criterion. The results, as scientific data, however, were not exact enough to be comparable. Furthermore they did not recognize the need for information regarding protection against hazards of lesser severity when the hazards to be guarded against did not require the full degree of protection.

About the year 1917, ASTM Committee C-5 again became active. In conferences with representatives of ten other interested technical organizations a reconsideration of the subject of fire test regulation was inaugurated and a complete new standard was evolved which was adopted August 26, 1918, by letter ballot and became C19-18, "Standard Specifications for Fire Tests of Materials and Construction." The principal changes that were made consisted of the combination of the two specifications into one, the elimination of the detailed specifications of the test structure, the introduction of the time-temperature curve, and the classification of results indicating fire-resistance ratings in accordance with the time of application and the pressure of the hose stream.

#### Latest Revision Adopted

Soon after the American Engineering Standards Committee was organized in 1918 the American Society for Testing Materials, as sole sponsor, requested approval of C19-18 by that body. It was adopted by AESC as a tentative American standard on March 1, 1919. However, when in 1922, on recommendation of ASTM Committee C-5, amendments were submitted the ASA Standards Council decided that the regular procedure should be followed and a sectional committee under the joint sponsorship of the American Society for Testing Materials, the National Bureau of Standards and the AESC Fire Protection Group was appointed.<sup>3</sup> Another complete revision was undertaken which finally resulted in the adoption and promulgation of American Standard A2-1934.

The latest revision, which has been favorably received by Standards Council and is now issued as American Standard A2.1-1942, was chiefly for

the purpose of clarifying the test procedure and does not materially alter it. It is hoped that further changes may not become necessary. As stated in the 1930 report of ASTM Committee C-5, "frequent revisions would be unwise because of its effect on the status of classifications derived from tests conducted in accordance with the present text."

The revised edition of American Standard Methods of Fire Tests of Building Construction and Materials (ASA A2.1-1942; ASTM C19-41, and the new standard, Methods of Fire Tests of Door Assemblies (ASA A2.2-1942; ASTM C152-41) were prepared by the following representative committee:

Rudolph P. Miller, American Society for Testing Materials, *Chairman*  
H. M. Robinson, Underwriters' Laboratories, Inc., *Secretary*  
National Bureau of Standards, U. S. Department of Commerce, *S. H. Ingberg*  
American Concrete Institute, *N. D. Mitchell*  
American Institute of Architects, *L. A. Walsh*; *T. I. Coe (alt)*  
American Institute of Steel Construction, *F. H. Frankland*; *B. F. Hastings (alt)*  
American Society of Civil Engineers, *G. E. Strehan*  
American Society of Mechanical Engineers, *R. C. Parlett*  
Associated Factory Mutual Fire Insurance Companies, *A. L. Brown*  
Building Officials Conference of America, *W. S. Lee*  
Canadian Engineering Standards Association, *A. C. Ross*  
Gypsum Association, *H. J. Schweim*; *J. M. Porter (alt)*  
National Lumber Manufacturers' Association, *L. W. Smith*; *R. G. Kimbell (alt)*  
Portland Cement Association, *C. A. Menzel*  
Structural Clay Products Institute, *H. C. Plummer*; *C. T. Bridgman (alt)*  
Underwriters' Laboratories, Inc., *A. R. Small*  
Member-at-Large, *W. J. Krefeld*

Sponsors for Committee A2 are the American Society for Testing Materials, the ASA Fire Protection Group (Associated Factory Mutual Fire Insurance Companies, National Board of Fire Underwriters, National Fire Protection Association, and Underwriters' Laboratories) and the National Bureau of Standards.

Other standards for protection against fire hazards approved by the ASA are given in the complete list of American Safety Standards, available from the ASA without charge.

Copies of the two new standards (A2.1-1942 and A2.2-1942) are available from the ASA at 25 cents each.

<sup>3</sup> A tentative standard had been adopted in 1926 but as it was only tentative specific mention of it is not included in this article.

## OPA Standards Division Sets Up Its Operating Sections

**S**EVEN operating sections to carry out the work of the new Standards Division of the Office of Price Administration have now been set up, Dexter M. Keezer, Deputy Administrator of OPA and Director of the Standards Division, announced recently. These sections and their chiefs are:

Food and Drug—Culver S. Ladd (for many years State Food Commissioner and Chemist of North Dakota)

Textile, Leather, and Apparel—H. S. Schenker (director of the Consumers' Testing Laboratory, Philadelphia; member ASA Advisory Committee on Ultimate Consumer Goods)

Consumer Durable Goods—Earl A. Graham (senior engineer, Sanderson & Porter)

Home Furnishings—Erwin G. Adelberger (interior architect and designer, Cleveland)

Lumber and Building Material—Elroy A. Ledwith (architect; consultant on housing to National Defense Advisory Commission)

Agricultural and Industrial Machinery—H. Seymore Pringle (assistant professor of agricultural engineering, Cornell University)

Rubber and Rubber Products—Theodore M. Miller (consulting chemist)

Sections to handle fuel and petroleum products; chemical and paints; transportation equipment; paper, paper products, and containers; and metals and metal products, as well as a commodity testing branch, are being organized.

M. L. Egert will be the administrative officer of the Standards Division, with W. S. MacLeod as chief of technical operations.

A government interdepartmental committee just organized will work with the new Standards Division, Mr. Keezer also announced. Dr. Faith Williams, chief of the Cost-of-Living Division of the U.S. Department of Labor, will serve as

### Government organizes Interdepartmental Committee to work with Standards Division

chairman. Other members will include Dr. John Sels, Office of Agricultural War Relations; Howard Coonley, Simplification Section, WPB Conservation Division; Clarence W. Kitchen, Agricultural Marketing Administration; Dr. A. S. McAllister, National Bureau of Standards; Henry Miller, Federal Trade Commission; Donald E. Montgomery, Consumers' Council; Miss Ruth O'Brien, Bureau of Home Economics; Dr. W. B. White, U.S. Department of Agriculture; H. J. Woolner, Bureau of Customs; Dr. Walter G. Campbell, Food and Drug Division; and C. W. Crawford, Food and Drug Administration.

The new committee will assist the Standards Division by helping to avoid duplication with other agencies; by assigning new projects to the most appropriate agency; giving technical advice on specific problems; helping to determine which standards problems should be handled first; and by giving the Division the benefit of its criticism and support, Mr. Keezer declared. The committee will also call to the attention of the Standards Division new projects which it might well undertake.

An article in the September issue of *INDUSTRIAL STANDARDIZATION* (page 215) explained the aims and purposes of the newly-created Standards Division, and the way in which the ASA will work with it.

### SAE Issues Alternate Aircraft Steel Standards

Alternate specifications for steels used in aircraft manufacture are now being distributed by the Society of Automotive Engineers as a substitute for standards in the Society's Aeronautical Material Specifications Series. These 16 alternate steel specifications have been prepared in accordance with the compositions listed in Table II of the Report of the WPB Technical Advisory Committee for Aeronautical Steels. They were recommended to the SAE Aeronautics Division by the SAE Aircraft Materials and Processes Committees at a meeting of the committees at Denver August 11-14. Action by the committees was taken on the basis of results of tests reported at this meeting.

The application of these alternate steels is still subject to approval on the basis of the facts of the individual case by the agency procuring the equipment, the SAE declares.

### Government Specifications Control Blackout and Camouflage Paints

New Government standard specifications have been established for the manufacture of blackout, luminous, and camouflage paints. Nine colors have been selected for paints used in general camouflage to conceal and protect factories, arsenals, and other such objectives in this country. The Bureau of Mines is now conducting a survey to determine available sources of minerals essential in the preparation of these paints.

# Canadian Standards Association Takes Action for War

War emergency measures have been adopted by the Canadian Engineering Standards Association during the past few months as a means of conserving steel, tin, zinc, brass, rubber, and other materials which are vital to the war effort.

Among these recommended changes in Canadian standards are:

1. An increase of 25 per cent in design stresses for structural steel for temporary buildings. (Approved by the Department of Munitions and Supply.)

2. An increase of 20 per cent in design stresses for steel for reinforced concrete to be used in temporary buildings. (Approved by the Department of Munitions and Supply.)

3. That reinforced concrete slabs, beams, and footings be deepened and spans shortened, columns thickened, and mixtures made richer, in order that a consequent saving in reinforcing steel may be effected. (Approved by Department of Munitions and Supply.)

4. Revision of the following specifications to bring them into line with Canadian manufacturing practice:

(a) National Defense Specifications O.S.23, "Cables Electric, 'D' Class."

(b) Admiralty Schedule 720/23/DG, "Multicore Tough Rubber Sheathed Cable" (for anti-magnetic mine use.)

5. Establishment, in cooperation with the Canadian Machine Tools Controller and the National Machine Tool Builders Association (of the United States), of a CESA specification to cover the construction and inspection of electrical features of machine tools.

6. Modification of requirements of Canadian Electrical Code, Part II, by temporarily permitting substitution of Type SJ for Type S connector cords for light portable electric tools.

7. Modification of requirements of CESA Specifications C22.2 Numbers 4, 15, 18, 24, and 40, by reducing the thickness of sheet metal used in electrical enclosures, by one gauge thickness, resulting in saving of steel.

8. Permission to substitute 18-gauge for 16-gauge sheet metal in oil-burner ignition transformers, resulting in a saving in steel.

9. Approval of porcelain wire connectors for use in electric fixtures, due to shortage of wire springs required for bakelite connectors.

10. Acceptance of unvulcanized rubber as an alternative for vulcanized rubber in connector cords of electric heaters.

11. Modification of requirements for use of grounding wires for certain types of electrical equipment, such as sterilizers, when installations are definitely to be in non-hazardous locations.

12. Acceptance of Type C and PO-64 cotton electric cords in place of POSJ-32 cords in portable floor lamps.

In addition to these recommendations already completed by the Canadian Engineering Standards Association, the Association reports that it is carrying on work which may result in substitution of moisture-repellent cloth for rubber linings in electric heating pads; substitution of reclaimed rubber for code rubber in the insulation of rubber-covered wires and cables; reduction of approximately 90 per cent in tin content of protective coatings for copper wire in rubber-covered wires and cables; and substitution of paper separators to replace tin coatings on copper wire in rubber-covered wires and cables.

Consideration of war measures has brought about a closer liaison with United States groups, the Canadian Engineering Standards Association declares, particularly with such organizations as the National Fire Protection Association, the National Electrical Manufacturers Association, the American Institute of Electrical Engineers, and the American Standards Association.

Liaison with the British Standards Institution and standards bodies of the British Empire has grown even stronger since the beginning of the war.

For air raid protection in Canada, the Canadian Engineering Standards Association has selected ten or 15 of the specifications of the British Standards Institution as the first step in protecting civilians against bombing attacks.

## Container Standards Will Save Shipping Space

Once again the vital importance of standardization in the war effort is dramatically brought to the fore. To insure against waste of precious shipping space in American ships taking war materials and supplies to our far-flung troops and Allies, a new section, the Container Coordinating Section, has been set up in the WPS Division of Purchases. The prime function of this Section is to coordinate container and packaging standards and specifications to assure, as far as reasonably possible, that shipments reach

destinations in satisfactory condition. In order to accomplish this the committee plans to establish uniform specifications for containers and packing materials of all kinds; prepare uniform procedure for application of preservatives against corrosion, and for protection against moisture; prepare designs of containers that permit economical utilization of transportation facilities; and prepare uniform procedures for packaging that result in efficient distribution of supplies in the field.

## University Offers New Course In Fire Prevention

The Center for Safety Education, New York University, is announcing a comprehensive course in Fire Prevention and Protection to begin on November 3rd, 1942. Coming about as a result of the interest generated by the forthcoming book, "Fire Prevention Education," this course will endeavor to fill a decided need in this important field. Not alone is such a course of peculiar value during the war emergency, but it has a peacetime value of incalculable significance.

The main subjects to be covered will include: The National Fire Waste, Its Causes and Factors in Its Reduction; Fire Prevention and Protection as Applied to Building Construction; Common Fire Hazards; Special Hazards; Private Fire Protection; The Conflagration Hazard; The Public Water Supply; The Public Fire Department; Fire Alarm Systems; The Potential Hazard; The Probability Hazard; Relation of Fire Prevention and Protection to Fire Control; Wartime Plant-Protection Inspection; Fire Safety on Piers and Wharves; and Fire Prevention in Shipyards. In these lectures use will be made of many standards approved by and in development by the American Standards Association, such as the Building Codes and Materials, and Prevention of Dust Explosions.

To give these important lectures, a group of nationally known lecturers is being secured. They include the following: T. Alfred Fleming,

National Board of Fire Underwriters, New York City; Professor L. H. Provine, Dean, School of Architecture, University of Illinois, Urbana, Ill.; George L. Swan, N. B. F. U., New York City; Rudolph Miller, Consulting Engineer, New York City; J. L. King, New York Fire Insurance Exchange, New York City; Harold E. Miner, Director of Safety & Fire Prevention, Du Pont Company, Wilmington, Del.; A. Cary Hutson, NBFU, New York City; Hylton R. Brown, U. S. Bureau of Mines, Pittsburgh, Pa.; Spencer T. Stack, New York Fire Insurance Exchange, New York City; Theodore Gunn, New Hampshire Board of Fire Underwriters; Clarence Goldsmith, Office of Civilian Defense, Washington, D. C.; Chief John J. McCarthy, New York Fire Department; A. Bruce Bielaski, NBFU, New York City; Charles Fischer, Consulting Engineer, New York City; C. A. Vlachos, Vlachos and Company, New York City; Percy Bugbee, National Fire Protection Association, Boston, Mass.; H. E. Newell, NBFU, New York City.

It is hoped to make this a permanent course as a service to the whole metropolitan area. After this course is completed, if sufficient demand is noted, short intensive courses in various subjects covered in the first course will be given. Information about this and other war emergency courses may be had from the Center for Safety Education, Eight Fifth Avenue, New York City.

## Save Manhours for Victory

In an effort to keep the American workman healthy and fit and so save many precious man-hours, a special appeal was sent by several high government officials to War Production Drive Committees. The joint appeal was sent to labor-management committees in more than 300 plants which are participating in the War Production Drive. The text of the statement follows:

Sick and injured war production workers lose 6,000,000 work-days every month.



We must save as many of those lost days as we possibly can for the Production Drive.

Only healthy workers can put into the drive what it takes—vigor, staying-power and the will to win.

It is your job to fight sickness and accidents. See to it that every medical and engineering means of prevention is provided in your plant. Make it a healthful working place.

Help the men and women in your plant to keep themselves healthy and on the job. You can do this by training them in health conservation and safety as carefully as you train them in efficiency.

Use your influence to see that your community has an active public health department: enough doctors, nurses and hospital beds to care for your workers and their families. Your Federal and State governments are doing their part. Make sure your community does its part.

If your plant is not already conducting a sound industrial hygiene program, write to the United States Public Health Service, Washington, D. C., for advice. Do it today. You can boost production, save time and lives if you start now. Save a day for Victory.

American Safety Standards offer nationally recognized engineering information to help in protecting industrial workers.



## Welding Industry Needs Standards To Aid War Production

Standards are needed in the welding industry as an aid in war production, G. F. Jenks, president of the American Welding Society, told the Society in his president's message, *Welding Journal*, July. "In war production, standardization and simplification are important. Through them large economies are possible in the production of raw material, semi-finished parts, and fabricated structures," Mr. Jenks declared.

"Welding is a comparatively new industry and its raw materials and methods may be less completely standardized than in the case of other processes. It seems highly desirable that every effort be made to simplify the raw materials of welding and standardize the procedures and methods of inspection.

"... Standards for electrodes have been developed on the basis of types, diameters and lengths. The dimensional standardization appears rational. The types vary with position of welding, current characteristics and physical properties of the all-weld-metal. Seemingly, standardization has proceeded rather far. Actually, there is no real standardization of electrodes



Courtesy Lincoln Electric Co.

as each manufacturer has introduced special brands to meet specification requirements. These brands differ as to composition and nature of the coating. Because of variation in coatings, electrodes of a standard type but of different manufacture are not interchangeable.

"... The development of electrodes would be accelerated by open discussion and publication of results of research and investigation.

"There has been a tradition in American industry that standardization and simplification to be effective must be accomplished through producer-consumer cooperation. Neither element by itself has the knowledge and experience to prepare standards acceptable to industry."

## Electrical Testing Laboratories Will Be Run by Former Employees

The Electrical Testing Laboratories has been purchased by a new corporation organized by a group of former employees headed by Preston S. Millar, president. F. M. Farmer, vice-president of the original ETL and former chairman of the ASA Standards Council and member of the ASA Board of Directors, remains as vice-president of the new organization.

Mr. Farmer, who has been closely affiliated with the American Standards Association for many years, has also been president of the American Institute of Electrical Engineers and the American Society for Testing Materials, both Member-Bodies of the ASA. Mr. Farmer is now in charge of inspection for the New York Ordnance District in addition to his duties as vice-president of the new ETL.

The new corporation takes over the eight-story and basement plant in New York City as well as the equipment of the original company in New York and elsewhere. It will continue in the business of electrical and general testing, inspection, research, and certification in a wide variety of

fields throughout the country, with representatives located in principal cities. It will certify conformity of products and devices with requirements of specifications, such as specifications of the Federal and State Governments, technical bodies and groups of manufacturers.

### New President for IES

The Illuminating Engineering Society, Associate Member of the American Standards Association, has a new president. Richard B. Brown, Jr., Illuminating Engineer, Boston Edison Company, took office October 1.

Mr. Brown was chairman of the IES committee on portable lamp specifications which put into practical operation the plan whereby portable lamps made in compliance with IES standards could be certified by an independent testing laboratory.

## Mexico and United States Agree On Air Raid Defense Insignia

Air raid wardens and Defense Corps members will be recognized by the same insignia on both sides of the Mexican-United States border, General J. Salvador S. Sanchez, chief of the Presidential Staff in charge of civilian defense for Mexico, announced September 15. Mexico's Civilian Defense organization has adopted insignia identical to that used by the OCD, its air raid wardens, and most of the Defense Corps members in the United States, General Sanchez told James M. Landis, Director of the Office of Civilian Defense in the United States. The national colors are used in the insignia of both countries. Thus a green circle is used, instead of blue, in Mexico as background for a white equilateral triangle on which the distinctive symbol of the service appears in red. PPC (Protection de la Poblacion Civil) replaces the "CD" familiar in this country. The Mexican air raid warden, however, will be distinguished by the diagonal red stripes used in the United States; the auxiliary police by the same red shield; the rescue squads by a ladder; the medical units by the caduceus, etc.

Members of only one branch of the defense corps in Mexico would not immediately recognize their fellow workers across the border. The

Mexican Auxiliary Firemen are distinguished by a red helmet on the basic design of the "Defense Pasiva" insignia. In this country it is a red maltese cross.

Action by the two countries in standardizing the civilian defense insignia symbolizes in practical form "the spirit of unity with which the two nations face their common enemies," Director Landis of the Office of Civilian Defense said. "There has been excellent cooperation in matters of civilian defense—a united front in fact as well as theory."



*Courtesy Office of Civilian Defense*  
Insignia of the OCD Medical Corps (left)  
and Rescue Squads (right)

## Analysis Shows Difference Between Regular and Emergency Specifications

The analysis of Emergency Alternate Federal Specifications, started by the Consumer Standards Section of the U. S. Department of Agriculture in the *Directory* reviewed by INDUSTRIAL STANDARDIZATION last month (page 237), has been carried a step farther. The *Directory* classifies the emergency specifications into the same commodity groups established for Federal Specifications. The new step in the program will take each commodity group and analyze the differences between the Emergency Federal Specifications and the corresponding regular Federal Specifications.

Two commodity groups have so far been analyzed, Metals Group QQ, and Metal Products Group RR. The comparison indicates the changes in materials, finishes or coatings, processes, chemical and physical requirements, dimensions, sizes, weights, types, classes, grades, materials or methods for packaging, labeling requirements, and test methods required during the emergency. The comparative document on Metals takes the speci-

fications through August 14, that on Metal Products through September 2.

It is expected that similar comparative analyses will be made for other commodity groups for which Emergency Alternate Federal Specifications have been issued.

The Emergency Alternate Federal Specifications have been developed under the direction of the Federal Specifications Executive Committee with the collaboration of the Conservation Division, War Production Board, as an aid in the conservation of strategic materials. They are for use in the purchase of the respective commodities by all departments and establishments of the Government.

A limited number of copies of Emergency Alternate Federal Specifications and comparative analyses of commodity groups may be obtained upon written request to the Specifications Branch, Conservation Division, War Production Board, Washington, D. C.

# New Foreign Standards Now in ASA Library

THE following new and revised standards, just received by the American Standards Association, may be borrowed by ASA Members, or ordered through the ASA Library.

## Australia

Boilers and Unfired Pressure Vessels and Their Appurtenances (SAA Boiler Code) CB.1-1942  
Testing Zinc Coating on Galvanised Articles K.53-1942  
Cane Trucks and Steel Wheels and Axles (Fixed-Running) for Cane Trucks, Specifications for SAA Technical Standards Nos. N.16 and 17-1942

## Canada

CESA Standard Specification for Oil Circuit-Breakers C77-1942  
CESA/ARP Series  
Blackout of Buildings No. 504  
Blackout Illumination No. 502  
Street Lighting During Blackouts No. 503  
Strengthening of Cellars in Houses No. 501  
Electric Ranges, Construction and Test of—Canadian Electrical Code Part II 1st ed C22.2-No. 61-1942 50¢

## Great Britain

### Revised British Standards

Metal-Sheathed Impregnated Paper-Insulated Plain Annealed Copper Conductors for Electricity Supply including Voltage Tests, Dimensions of BS 480-1942 (Superseding BS 480-1933)  
Sand Lime (Calcium Silicate) Bricks BS 187-1942 (Superseding BS 187-1934)  
Structural Steel for Shipbuilding BS 13-1942 (Superseding BS 13-1910)

### New British Standards

Exciter Lamps for 35 mm Projectors BS 1015-1942  
Test Code for Continuous Vertical Retorts BS 1034-1942  
Raw Copper BS 1035 to 1040-1942 (Superseding BS 198-1925 and 199, 200, 201, 202, 203-1924)  
BS 1035 Cathode Copper  
BS 1036 Electrolytic Tough Pitch High Conductivity Copper  
BS 1037 Fire Refined Tough Pitch High Conductivity Copper  
BS 1038 99.85 per cent Tough Pitch Copper (Conductivity not Specified)  
BS 1039 99.75 per cent Tough Pitch Copper (Conductivity not Specified)  
BS 1040 99.50 per cent Tough Pitch Copper (Conductivity not Specified)  
Recommended Designs for Plug Ring and Gap Gauges BS 1044-1942 (Including Memorandum June, 1942)  
Manganese Steel Gas Cylinders for Atmospheric Gases BS 1045-1942

### Amendments to British Standards

Indicating Ammeters, Voltmeters, Wattmeters, Frequency and Power-Factor Meters CG (EL) 396 (Amendment to BS 89-1937)  
Miners' Lamp Bulbs CG (CR) 407 (Amendment to BS 535-1938)

### Amendments to British Standards—(Continued)

Strength Tests for the Protective Toe Cap of Boots used for Industrial Purposes CG (PSM) 571 (Amendment to BS 953-1941)

### British War Emergency Standards

Camouflage Paints BS 987-1942  
Marking of Amateur and Commercial Cameras and Lenses other than Box Cameras and Single Lens Folding Cameras BS 1019-1942  
Silicon Bronze Ingots and Castings (1 Vol.)  
Silicon Bronze Castings BS 1030  
Silicon Bronze Ingots BS 1029  
Filling Valves and Hose Connections for Traction Gas Bags BS 1046-1942  
Air-Cooled Blastfurnace Slag Coarse Aggregate BS 1047-1942  
Schedule of Sizes and Types of Packages for Pre-packed Commodities for British Packers in the United Kingdom for the Home Trade BS 1048-1942

### Special British War Emergency Issue

Services' Schedule of Carbon and Alloy Steels including Free-Cutting Types for Armaments and Vehicles (excluding Major Gun Forgings, Armor and Shells) BS/STA 5-1942 (Based on BS 970-1942 En. Series and incorporating WV Schedule)

### Amendments to British War Emergency Standards

Rubber-Insulated Cables and Flexible Cords for Electric Power and Lighting CG (EL) 408 (Amendment to BS 7-1939)  
Screw Threads of Whitworth Form CG (ME) 623 (Amendment to BS 84-1940)  
Side-Entry Wall Plugs and Sockets for Domestic Purposes, 2-Pole CG (EL) 409 (Amendment to BS 372-1930)  
Cold Drawn Weldless Steel Boiler and Superheater Tubes for Designed Steam Temperatures not exceeding 850°F (454°C) CG (ME) 531 (Amendment to BS 494-1933)  
Hot Finished Weldless Steel Boiler and Superheater Tubes for Designed Steam Temperatures not exceeding 850°F CG (ME) 531 (Amendment to BS 512-1934)  
Two-Pole and Earthing-Pin Plug and Socket-Outlets CG (EL) 409 (Amendment to BS 546-1934)  
High Tensile Structural Steel for Bridges, etc. and General Building Construction CG (IS) 715 (Amendment to BS 548-1934)  
Rolled Steel Bars and Hard-Drawn Steel Wire for Concrete Reinforcement CG (IS) 716 (Amendment to BS 785-1938)  
Rubber Mats for Electrical Purposes, CG (EL) 369 (Amendment to BS 921-1940)  
Dimensions, Limits and Tolerances for Screwing Taps CG (ME) 442 (Amendment to BS 949-1941)  
Bituminous Roofing Felt including Classification and Methods of Laying CG (B) 721 (Amendment to BS 989-1941)  
Metal Windows and Doors CG (B) 223 (Amendment to BS 990-1941)

### BS Air Raid Precaution Specifications

Water Paints for Traffic Painting Supplement to BS/ARP No. 38

#### BS Board of Trade Specifications

Industrial Overalls BS/BOT 4-1942  
Women's Domestic Overalls BS/BOT 5-1942  
Girls' Shoes BS/BOT 7-1942  
Boys' Boots and Shoes BS/BOT 8-1942  
Men's Boots and Shoes (Lower and Medium Grades) BS/BOT 9-1942  
Men's, Women's and Boys' Heavy Boots BS/BOT 10-1942  
Schedule of Tinplate Hollow-Ware BS/BOT 15-1942  
Men's and Women's Shoes (Higher Grade) BS/BOT 21-1942  
Infants' Walking Shoes BS/BOT 22-1942  
Rayon Cloths BS/BOT 23-1942  
Cotton Cloths (including Cotton and Rayon Mixtures) BS/BOT 24-1942

#### New Zealand

##### War Emergency Standards

NZSS E3 Galvanized Iron or Steel Binding Wire  
NZSS E4 Steel Sheets for Transformers  
NZSS E5 Tinplate  
NZSS E6 Galvanized Barbed Steel Fencing Wire  
NZSS E7 Rolled Steel Sections for Structural Purposes  
NZSS E8 Black and Hot-Dipped Zinc-coated (Galvanized) Welded and Seamless Steel Pipe for Ordinary Uses  
NZSS E9 Seamless Steel Boiler Tubes for High Pressure Service  
NZSS E10 Lap-welded and Seamless Steel and Lap-welded Iron Boiler Tubes  
NZSS E11 Stranded Galvanized Steel Guy and Messenger Wire  
NZSS E12 Hard-drawn Copper Wire  
NZSS E13 Zinc-coated (Galvanized) Iron or Steel Telephone and Telegraph Line Wire  
NZSS E15 Plain Galvanized Steel Spring Wire  
NZSS E16 Tempered Steel Spring Wire  
NZSS E17 Heels for Women's Footwear  
NZSS E18 Rolled Steel Bars for Concrete Reinforcement  
NZSS E19 Cold-Drawn Steel Wire for Concrete Reinforcement  
NZSS E20 Structural Steel for Shipbuilding  
NZSS E21 Structural Steel for Bridges and General Building

##### War Emergency Standards—(Continued)

NZSS E22 Cold Rolled Mild Steel Strip  
NZSS E23 Copper Tape (Annealed)  
NZSS E24 Copper Wire (Annealed)  
NZSS E25 Cadmium-copper wire (Hard Drawn or Annealed)  
NZSS E26 Cadmium-copper Tape (Annealed)  
NZSS E31 Stirrup-pump Fire-extinguishers  
NZSS E34-E48 Footwear  
NZSS E50 Bucket-pump Fire-extinguishers  
NZSS E51 Ready-mixed Paint for Priming Coats for Woodwork (Excluding Totara)  
NZSS E52 Ready-mixed Paint for Under-coats for Woodwork  
NZSS E72 Recommendations for the Installation, Maintenance, and Operation of First-aid Fire-extinguishers  
NZSS E75 Diameters of Filter Pads for Gas Producers for Motor Vehicles  
NZSS E76 Free Cutting Brass Rod  
NZSS E77 Black Steel Bars for the Production of Machined Parts for General Engineering Purposes  
NZSS E78 Bright Steel Bars for the Production of Machined Parts for General Engineering Purposes

##### War Emergency Purchasing Directions

NZSS PD5 Steel for Heel Tips for Army Boots  
NZSS PD6 Hollow Drill Steel for Use in Metalliferous Mines  
NZSS PD7 Steel Bars for the Manufacture of Collars for Shafting  
NZSS PD8 "Monel" Metal Sheets for the Manufacture of Hospital Sterilizers  
NZSS PD10 Galvanized Corrugated Roofing Sheets and Plain Galvanized Sheets  
NZSS PD11 Soft Brass Rod for Riveting  
NZSS PD12 Antimony Ingots  
NZSS PD13 3% Nickel-Steel Round Bars (Annealed)  
NZSS PD14 Special Self-Hardening Tool Steel (Armstrong)  
NZSS PD16 Enamelling Quality Steel Sheets  
NZSS PD17 Stainless Steel Sheets  
NZSS PD18 Cast Steel for the Manufacture of Cutlery  
NZSS PD19 Black Steel Bars  
NZSS PD20 Bright Steel Shafting  
NZSS PD21 Hot Rolled Black Steel Sheets

### New List of American Standards

The American Standards Association has published a new edition of the *List of American Standards*. This will not be distributed with the current issue of INDUSTRIAL STANDARDIZATION but copies may be obtained free of charge by all readers merely by writing in to the American Standards Association at 29 West 39th Street, New York.

The *List* includes 558 American Standards. For convenience in finding the standards desired, the *List* is broken down industrially and there is also an alphabetical index of all the standards. Special listings of Commercial Standards, of American War Standards, and of American Safety Stand-

ards make the new *List of Standards* more convenient for reference purposes than any previous edition.

The American Standards listed in each case represent general agreement on the part of maker, seller, and user groups as to the best current industrial practice. These standards are used throughout industry and by municipal, state, and Federal governments. They are particularly important now in connection with the war effort.

Send for your copy now and keep it in a convenient place. The next *List of Standards* will probably be published in January.



## Colonel Stilwell Is ASA Board Member

Colonel John Stilwell has just been elected to serve a three-year term on the Board of Directors of the American Standards Association.

Colonel Stilwell is serving his third term as president of the National Safety Council. He has also served as president of the Greater New York Safety Council and of the American Museum of Safety. He has for many years been interested in the development of safety standards as a means of preventing accidents. He was a member of the Safety Code Correlating Committee of the American Standards Association in the early days of safety standardization work.

As General Superintendent of Transportation and later Vice-President of the Consolidated Edison Company of New York, Col. Stilwell has had a good deal to do with the safety program of that company. "The American Standard safety codes have contributed in no small measure to the remarkable progress that has been made in our Accident Prevention Program," Col. Stilwell has said.

Colonel Stilwell was Assistant Chief of Staff of the 4th Army Corps during the last War. He is brother of Lieutenant General Stilwell, who is in charge of American forces in China.



Colonel John Stilwell

## AMA Grading Service Started at New York Market

Under a cooperative agreement, Federal-State market news and grading services are now being operated at New York's new \$440,000 Live Poultry Terminal. Under this arrangement all poultry is sold at the terminal on the basis of U. S. grades. The market news and grading services, which started August 3rd, are being operated jointly by the Agricultural Marketing Administration, the New York State Bureau of Markets, and the New York City Department of Markets.

Through a Federal-State agreement, a Federal-State market reporter covers market trends and prices through actual sales based on Government grades of poultry. His reports are widely distributed to poultry dealers and producers throughout the United States through the AMA's leased wire services and terminal offices.

Dealers and employees of dealers grade the poultry, but a Federal-State grader acts as a review grader and in cases of dispute has authority to make final determination of the grades, or to examine any live poultry offered for sale which he does not believe to be properly graded. Fees are charged for grading services performed by the Federal-State grader.

## Foreign Trade Convention Urges Inter-American Standards

The Twenty-Ninth National Foreign Trade Convention which met at Boston October 7 to 9, adopted the following declaration headed "Standardization":

The Convention approves the endeavor to establish throughout the Americas a comprehensive acceptance of agreed standard specifications as a necessary step forward in facilitating orderly commercial procedure, and closer inter-American commercial cooperation.

## Gabel Represents Photographic Group On ASA Standards Council

M. Wren Gabel, Production Department, Eastman Kodak Company, Rochester, is the alternate representative of the Photographic Manufacturers Group on the Standards Council of the American Standards Association. Mr. Gabel replaces William S. Vaughn whose present work is not well suited to his continuing to serve as alternate representative.

## Standards for Testing Textiles Are Approved by ASA

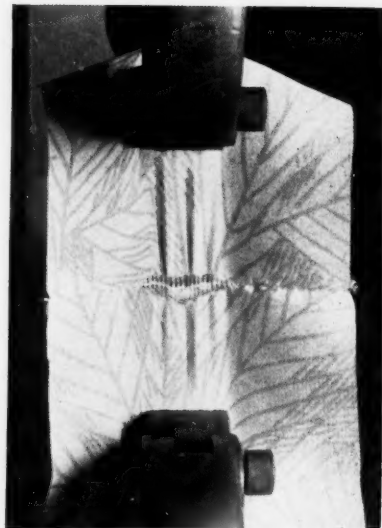
The American Standards Association recently announced approval as American Standards of the following two specifications dealing with textile testing machines and methods of testing wool felt. These standards were developed by the American Society for Testing Materials and are of considerable interest to manufacturers and purchasers in the textile industry, as well as to consumer groups:

### Textile Testing Machines (ASA:L15.1-1942; ASTM:D76-41)

This specification describes testing machines generally applicable for the determination of certain physical characteristics of textile materials. It outlines types of machines to be used for determining breaking strength and elongation of textiles, thickness gage, etc.

### Testing Wool Felt (ASA:L16.1-1942; ASTM:D 461-40)

The methods of testing wool felt described in these standards are applicable to fabrics which are neither woven nor knitted, but built up by the interlocking of wool fibers, by mechanical work, chemical action, moisture and heat. Felt may be produced by one or a combination of any of these factors; it may consist of wool or wool mixed with other fibers, or fibers other than wool. The standard takes up physical tests on length, width, thickness, weight, breaking strength, split-



This machine for testing breaking strength of textiles is used at the National Bureau of Standards.

ting resistance and also outlines a chemical and microscopic analysis for the product.

These standards are available from the American Standards Association, 29 West 39th Street, New York, at 25 cents per copy. They can be ordered singly or in sets.

## New Stabilization Office Expected To Push Standardization

**S**TANDARDIZATION of civilian goods is slated for an increasingly important place in the economy of the United States if predictions made by commentators recently concerning the activities of the new Office of Economic Stabilization are correct. According to Arthur Krock, commentator for the *New York Times*, observers close to the new organization expect James F. Byrnes, chief of the stabilization office, to strengthen the Office of Price Administration and to make its program more effective. The standardization of civilian goods will be one of the activities that will be urged on Mr. Byrnes by observers close to the scene, Mr. Krock declares, because of the possible economies in production and more efficient use of materials and manpower.

"The illustration they use," Mr. Krock explains, "is that of Canadian biscuits (crackers in the United States). Some time ago this industry applied for subsidies. On investigation it was

found that 5,000 different types of crackers were being manufactured. By ordering these reduced to less than 100 the Canadian Government put the manufacturers in the black and released much manpower for the direct war program. It is believed by the experts herein quoted that this standardization can be effected on a widespread basis in the United States, obviate many subsidies, and add a very large manpower group to the armament program pool."

If Mr. Byrnes takes the advice of the experts quoted by Mr. Krock, he will find that standardization and simplification is already well under way, through the activities of the Simplification and Specifications sections of the WPB Conservation Division, through the program of concentration of industry started recently by the WPB, and also through the new Standards Division of the Office of Price Administration.

# Standards Issued by Associations and Government

(See "ASA Standards Activities", page 266, for new American Standards and progress on ASA projects)

For the information of ASA Members, the American Standards Association gives here a list of the standards received during the past month by the ASA Library for its classified files. With the increasing amount of material being received it has been decided to eliminate from the monthly list a few of those standards which may not be so important to ASA Members, such as Federal Specifications for foods. The list below, therefore,

includes only those standards which the American Standards Association believes will be of greatest interest to Members in connection with their war production.

The standards listed may be consulted by ASA Members at the ASA Library, or copies may be obtained from the organization issuing the standard. Addresses of these organizations are given for your convenience.

## Associations and Technical Societies

### American Iron and Steel Institute (350 Fifth Avenue, New York, N. Y.)

#### Steel Products Manual:

Alloy Steels Supplementary Sheets 118 through 147, Sec. 10 August 17, 1942

Alloy Steel Supplementary Sheet 148, Sec. 10 August 31, 1942

Cold-Rolled Carbon Steel Strip, Sec. 13 July, 1942 25¢

Hot-Rolled Carbon Steel Strip, Sec. 12 July, 1942 25¢  
Supplementary National Emergency Steels NE 9400, 9500 and 9600 Series September, 1942

### American Petroleum Institute—Department of Accident Prevention (50 West 50th Street, New York, N. Y.)

Measuring, Sampling, and Testing Natural Gas API Code No. 50-A 2nd Ed May, 1942 50¢

Measuring, Sampling, and Testing Natural Gasoline API Code No. 50-B 2nd Ed May, 1942 50¢

Review of Fatal Injuries in the Petroleum Industry for 1941 September, 1942

Standard Field Procedure for Testing Drilling Fluids, Recommended Practice (Tentative) API Code No. 29 2nd Ed July, 1942 50¢

### American Welding Society (33 West 39th Street, New York, N. Y.)

Definitions of Welding Terms, and Master Chart of Welding Processes May 7, 1942 40¢

Instruction of Welding Operators, Code of Minimum Requirements for Part A—Arc Welding of Steel 3/16 to 3/4 In. Thick (Tentative) 50¢

Mechanical Testing of Welds, Standard Methods February 19, 1942 40¢

Spot Welding of Aluminum Alloys, Tentative Standards and Recommended Practices and Procedures \$1.00

### Association of American Railroads—Operations and Maintenance Department, Mechanical Division, Electrical Section (59 East Van Buren Street, Chicago, Ill.)

Manual of Standard and Recommended Practice of Electrical Section, Mechanical Division—1941 Additions and Revisions

### Association of Casualty and Surety Executives—National Conservation Bureau (60 John Street, New York, N. Y.)

Handbook of Industrial Safety Standards Revised 1942 Ed 55¢

### Association of Iron and Steel Engineers (1010 Empire Building, Pittsburgh, Pa.)

Electric Overhead Traveling Cranes for Steel Mill Service, Specifications for Published in August, 1942 issue of *Iron and Steel Engineer*

### Metal Cutting Tool Institute (410 Asylum Street, Hartford, Conn.)

Standard Tap & Die Catalog: 2 revised pages Revisions effective January 1, 1943

### National Electrical Manufacturers Association (155 East 44th Street, New York, N. Y.)

Enclosed Switch Standards Publication 42-78 August, 1942 60¢

Household Electric Refrigerator Standards Publication 42-79 August, 1942 30¢

Power Switchgear Assemblies Standards Publication 42-72 April, 1942 \$3.25

Service Equipment Standards Publication No. 42-74 April, 1942 30¢

Transformer Standards Publication 42-73 Eighth Edition May, 1942 \$3.00

Wire Diameters for Mineral Aggregate Production Screens R147-42

### Underwriters' Laboratories, Inc. (161 Sixth Avenue, New York, N. Y.)

Branch-Circuit and Service Circuit-Breakers Second Edition August, 1942

Fluorescent-Lamp Control Equipment August, 1942

Temperature-Indicating and Regulating Equipment, Standard for 1st ed August, 1942

## United States Government

### National Bureau of Standards (Washington, D. C.)

Acoustic Performance of 16-Millimeter Sound Motion-Picture Projectors July 6, 1942 Circular C439  
Paper and Related Subjects April 22, 1942 Letter Circular LC-690 (Supersedes LC-543)

#### Commercial Standards

Plywood (Hardwood and Eastern Red Cedar) 2nd Ed. July 15, 1942 CS35-42 (Supersedes CS35-31)

#### Simplified Practice Recommendations

##### Approved by Industry

Surgical Gauze R86-42

In Print (Copies Available from Superintendent of Documents, Government Printing Office, Washington, D. C. 10¢ each)

Alphabetical List of Simplified Practice Recommendations Revised to September 1, 1942

Cotton Jersey Cloth and Tubing for Work Gloves R194-42

Dental Excavating Burs R195-42

Files and Rasps R6-42

Packages for Shortening Salad Oil, and Cooking Oil R193-42

Salt Packages R70-42

Spring and Slotted Clothespins R188-42

Steel Reinforcing Bars R26-42

### Federal Specifications Executive Committee (U. S. Treasury Department, Washington, D. C.)

#### Federal Specifications

(Copies available from Superintendent of Documents, Government Printing Office, Washington, D. C.)

The date after the title of the specification indicates when it becomes effective.

Bronze, Phosphor; bars, plates, rods, shapes, sheets, and strips (Amendment 2) QQ-B-746 December 1, 1942

Cable-Units; battery and starter (new) J-C-231 December 15, 1942

Detergents, Special; (for aluminum-ware, dishwashing-machines, and manual cleaning) (Amendment 1) QQ-I-706a December 15, 1942

Fiberboard; insulating (superseding LLL-F-321a, 5/21/35) LLL-F-321b December 15, 1942

Heaters, Electric; water, storage, domestic (new) W-H-196 December 15, 1942

Helmets and Shields (Hand-Held); welders' (Amendment 1) GGG-H-211 December 15, 1942

Hoes; mattocks, and picks (Amendment 1) GGG-H-506a December 1, 1942

Iron and Steel; sheet, tinned (tin-plate) (Amendment 1) QQ-I-706a December 15, 1942

Leather; lace (superseding KK-L-201, 11/19/35) KK-L-201a December 15, 1942

Lubricants and Liquid-Fuels; general specifications (Methods for sampling and testing) (superseding VV-L-791a, 10/2/34) VV-L-791b October 15, 1942

Oil, Soybean; refined (for paint and varnish) (new) JJJ-O-348 December 1, 1942

Rope:

Sisal (new) T-R-631 December 1, 1942

Wire (Amendment 5) RR-R-571 November 1, 1942

Soap and Soap-products; general specifications (methods for sampling and testing) (superseding P-S-536, 3/4/37) P-S-536a December 15, 1942

Sodium-Thiosulfate (Hyposulfite); technical (Amendment 1) O-S-616 January 1, 1943

Strapping, Flat; steel (superseding QQ-S-781) QQ-S-781a December 15, 1942

Wrenches; pipe (Amendment 3) GGG-W-651a December 15, 1942

#### Emergency Alternate Federal Specifications

(Prepared in collaboration with the War Production Board)

##### Aluminum:

bars, rods, shapes and wire (superseding E-QQ-A-411a, 8/16/41) E-QQ-A-411a August 19, 1942

plates and sheets (superseding E-QQ-A-561, 8/16/41) E-QQ-A-561 August 19, 1942

##### Aluminum-alloy:

aluminum-chromium-magnesium-silicon; plates and sheets (superseding E-QQ-A-334, 10/15/41) E-QQ-A-334 August 25, 1942

aluminum-copper-magnesium-manganese; bars, rods, shapes and wire (superseding E-QQ-A-351a, 8/25/42) September 15, 1942

AL-17, aluminum-copper-magnesium-manganese; plates, sheets, and strips (superseding E-QQ-A-353a, 10/15/41) E-QQ-A-353a August 25, 1942

AL-24, aluminum-copper-magnesium (1.5 percent)-manganese; plates, sheets, and strips (superseding E-QQ-A-355a, 10/15/41), E-QQ-A-355a August 25, 1942

aluminum manganese; bars, rods, shapes and wire (superseding E-QQ-A-356a, 8/19/42) E-QQ-A-356a, September 9, 1942

forgings, heat-treated (superseding E-QQ-A-367a, 10/15/41) E-QQ-A-367a August 19, 1942

aluminum manganese; bars, rods, shapes and wire (superseding E-QQ-A-356a, 8/16/41) E-QQ-A-356a August 19, 1942

aluminum manganese; plates and sheets E-QQ-A-359a August 19, 1942

##### Aluminum-Base-Alloy:

die castings (superseding E-QQ-A-591, 8/25/42) E-QQ-A-591 September 15, 1942

permanent-mold-castings (superseding E-QQ-A-596, 10/15/41) E-QQ-A-596 August 25, 1942

sand-castings (superseding E-QQ-A-601, 6/10/42) E-QQ-A-601 August 19, 1942

Aluminum-pigment; powder and paste (for) paint superseding E-TT-A-466 and E-TT-A-476, 8/13/41) E-TT-A-468 August 28, 1942

Blasting-Apparatus (Machines, Blasting; Galvanometers and Rheostats for Testing Blasting Circuits and Machines) E-W-B-411 September 5, 1942

Brass, Commercial; bars, plates, rods, shapes, sheets, and strips (superseding E-QQ-B-611a, 9/16/41) E-QQ-B-611a August 14, 1942

##### Brushes:

calcimine (superseding E-H-B-141, 6/10/42) E-H-B-141 September 5, 1942

dauber; long-paddle E-H-B-181 September 10, 1942

paint; metal-bound, flat (high grade) (superseding E-H-B-421, 3/6/42) E-H-B-421 August 28, 1942

paint; metal-bound, flat (medium-grade) (superseding E-H-B-431, 3/6/42) E-H-B-431 September 2, 1942

paint; metal-bound, flat (utility-wall) (superseding E-H-B-436, 5/29/42) E-H-B-436 September 5, 1942

varnish; flat (double X thickness) (superseding E-H-B-701, 5/29/42) E-H-B-701 September 9, 1942

varnish (triple X thickness) (superseding E-H-B-706, 5/29/42) E-H-B-706 August 25, 1942

varnish; oval (superseding E-H-B-711, 3/19/42) E-H-B-711 September 5, 1942

Cable and wire; rubber-insulated, other than building purposes, superaging-grade (0 to 8,000-volt service) (superseding E-J-C-121, 5/23/42) E-J-C-121 August 24, 1942

Cans; safety (for gasoline, naphtha, etc.) E-RR-C-92 September 15, 1942



## Emergency Alternate Specifications—(Continued)

**Cards:**  
guide, pressboard (file size) E-UU-C-96b August 25, 1942  
index (superseding E-UU-C-128, 7/14/42) E-UU-C-128 August 19, 1942  
**Cleaners, Vacuum; electric, portable** E-W-C-421a August 19, 1942  
**Clock, Synchronous-Motor; (for) general purposes** E-GG-C-466 September 9, 1942  
**Couplings:**  
hose, cotton (rubber lined) and linen (unlined) (superseding E-WW-C-621a, 5/8/42) E-WW-C-621a August 6, 1942  
hose, garden and water (superseding E-WW-C-623a, 5/8/42) E-WW-C-623a August 6, 1942  
hose, oil-suction and discharge (superseding E-WW-C-626, 5/8/42) E-WW-C-626 August 6, 1942  
hose, steam E-WW-C-636 August 6, 1942  
hose, water-suction (superseding E-WW-C-646, 5/8/42) E-WW-C-646 August 6, 1942  
**Drums; steel, type 5 (for inflammable or poisonous liquids) (superseding E-RR-D-726a, 6/30/42) E-RR-D-726a** August 6, 1942  
**Folders; file, pressboard (superseding E-UU-F-581b, 4/3/42) E-UU-F-581b** August 25, 1942  
**Grinders; bench, electric E-W-G-656** August 14, 1942  
**Hose; water, braided (superseding E-ZZ-H-601, 7/28/42) E-ZZ-H-601** August 28, 1942  
**Hose, Fire; cotton, rubber-lined (superseding E-ZZ-H-451a, 6/23/42) E-ZZ-H-451a** September 10, 1942  
**Leather:**  
sole (cut-outer, and top-lift, vegetable-tanned, factory and finders) E-KK-L-261b September 5, 1942  
upholstery (superseding E-KK-L-291, 7/18/42) E-KK-L-291 September 5, 1942  
**Machines:**  
coffee-grinding; electrically operated E-OO-M-23 August 19, 1942  
dishwashing; and dishbaskets (superseding E-OO-M-31a, 1/30/42) E-OO-M-31a August 4, 1942  
floor-polishing and scrubbing; electric (superseding E-W-M-46a, 3/19/42) E-W-M-46a August 14, 1942  
food-mixing; electrically-operated; commercial type (cake and kitchen) E-OO-M-38 August 19, 1942  
vegetable-peeling; electrically-operated (superseding E-OO-M-106, 8/23/41) E-OO-M-106 August 4, 1942  
**Mats, Floor; rubber, link-type E-ZZ-M-46** August 25, 1942  
**Mops; cotton (superseding E-T-M-561a, 7/9/42) E-T-M-561a** September 9, 1942  
**Mopping-Outfits (superseding E-RR-M-571, 7/18/42) E-RR-M-571** September 5, 1942  
**Mowers; lawn, power E-OO-M-681** July 30, 1942  
**Nails; Spikes; Staples; and Tacks (superseding E-FF-N-101, 5/15/41) E-FF-N-101** August 19, 1942  
**Needles, Hypodermic; for Luer syringes E-GG-N-196** September 15, 1942  
**Paint:**  
lead-zinc-base, ready mixed and semi-paste, white and tinted (superseding E-TT-P-36a, 2/24/42) E-TT-P-36a August 28, 1942  
titanium-zinc and titanium-zinc-lead, outside ready-mixed, white (superseding E-TT-P-101a, 4/7/42) E-TT-P-101a August 28, 1942  
traffic, exterior, white and yellow E-TT-P-156 August 28, 1942  
**Paper:**  
bond, white and colored (superseding E-UU-P-121c, 5/25/42) E-UU-P-121c August 14, 1942  
computing-machine (superseding E-UU-P-185, 1/28/42) E-U-P-185 August 14, 1942  
index (superseding E-UU-P-258a, 7/14/42) E-UU-P-258a August 19, 1942

## Paper—(Continued)

manifold (superseding E-UU-P-328a, 5/25/42) E-UU-P-328a August 11, 1942  
mimeograph (superseding E-UU-P-388a, 4/3/42) E-UU-P-388a August 19, 1942  
writing (superseding E-UU-P-641, 6/25/42) E-UU-P-641 August 19, 1942  
**Paulins and Covers; duck (tarpaulins) E-K-P-146** September 10, 1942  
**Pencils, Mechanical; leads and erasers E-SS-P-186** August 24, 1942  
**Pins; office (superseding E-FF-P-401a 3/6/42) E-FF-P-401a** September 5, 1942  
**Plaster; adhesive, surgical (superseding E-U-P-401, 7/9/42) E-U-P-401** September 2, 1942  
**Plumbing-fixtures; (for) land use (Formed-metal plumbing-fixtures) E-WW-P-542** August 24, 1942  
**Putty; pure-linseed-oil, (for) wood-sash-glazing E-TT-P-791a** August 28, 1942  
**Rope; wire (superseding E-RR-R-571, 6/2/42) E-RR-R-571** September 2, 1942  
**Squares; carpenters', die-makers', and machinists' (superseding E-GGG-S-656, 2/16/42) E-GGG-S-656** September 15, 1942  
**Straightedges; steel E-GG-S-776** September 2, 1942  
**Syringes; all-glass, Luer E-GG-S-921a** August 28, 1942  
**Towels; paper (superseding E-UU-T-591, 4/25/42) E-UU-T-591** August 25, 1942  
**Tubes, Automobile and Motorcycle; inner E-ZZ-T-721c** September 2, 1942  
**Varnish; spar, water-resisting (superseding E-TT-V-121a, 9/30/41) E-TT-V-121a** August 28, 1942  
**Wire, Steel; Bookbinders' (superseding E-QQ-W-414, 2/4/42) E-QQ-W-414** August 24, 1942

## U. S. Department of Agriculture, Agricultural Marketing Administration (Washington, D. C.)

**Canned Pears (U. S. Standard April 15, 1942)**  
**Dried Apricots (Amendment to U. S. Standard August 1, 1942)**  
**Dried Peaches (Amendment to U. S. Standard August 1, 1942)**  
**Dried Prunes (Amendment to U. S. Standard August 1, 1942)**  
**Processed Raisins (Amendment to Tentative U. S. Standard August 1, 1942)**  
**Shelled Runner Peanuts (U. S. Standard September 21, 1942)**

## U. S. Department of Labor

**Suggested Standards for Industrial Safeguards (Lists standards for Food Preparation; Metal Working Machinery; Paper and Printing; Paper Box Manufacturing; Railings and Toeboards; Runways, Elevated; Transmission Machinery; and Woodworking Machinery) Bulletin No. 7 For sale by Superintendent of Documents, Washington, D. C. 65¢**

## U. S. Army and Navy

**List of Materials and Process Specifications for use in the maintenance and construction of aircraft (Lists Air Corps, Army-Navy Aeronautical, U. S. Army, and Federal Specifications) May be obtained for use in connection with Air Corps contracts and for bidding purposes upon request to the Assistant Chief, Material Division, Wright Field, Dayton, Ohio. Bulletin No. 23, August 10, 1942**

## U. S. Office of Civilian Defense (Washington, D. C.)

**Blackout of Buildings**  
**Blackout Requirements for Highway Movement**  
**Street Lighting During Blackouts**

# Many WPB and OPA Orders Are Based on Standards

Many War Production Board and Office of Price Administration orders require compliance with existing standard specifications, include

standards in the Order itself, or provide for simplification schedules. The following have come to our attention during the past month:

## War Production Board

### Agave Fiber (General Preference Order M-86, as amended August 5, 1942)—

Limits the use of Agave Fiber for wrapping twine, binder twine, carpet yarns, padding or stuffing, reinforced paper, tape, and plastics, and agave cordage. Defines "wrapping twine" as twine, including lath yarns (ply and yarn goods), included in the National Bureau of Standards' Simplified Practice Recommendation R 92-38, and any other twine containing agave fiber and suitable for the same purposes for which those twines described in SPR 92-38 are used.

### American Extra Staple Cotton (Conservation Order M-197 as amended September 2, 1942)—

Defines "Reserved American extra staple cotton" SXP Variety, Pima Variety, and Sea Island Variety in terms of the "official grading standards of the United States." The Director General for Operations may require that any lot of American extra staple cotton held in the United States be graded by referring representative samples thereof for classification to the Appeal Board of Review Examiners, United States Department of Agriculture, Washington, D.C.

### Beds, Springs and Mattresses (General Limitation Order L-49 as amended August 4, 1942)—

Restricts production of coil, flat, fabric, and box bedsprings and specifies the amount of iron or steel which may be used in different types of bedsprings.

### Conservation of New Automotive Vehicles Subject to Rationing by Federal Agencies (Conservation Order M-216)—

Declares the policy of the War Production Board to be that all reserve vehicles are required to be maintained in accordance with the standards for maintenance set forth in Schedule 1 of this Order. "In view of the discontinuance of production, the stock of reserve vehicles herein referred to constitutes the total available supply of such vehicles in the United States," the Order declares. "They are urgently needed for war purposes and for the maintenance of the industrial economy of the nation. The maintenance of these vehicles in prime mechanical condition is indispensable to their full utilization for the war purposes for which they are being reserved. These reserve vehicles can be maintained in prime mechanical condition provided conservation operations are performed upon them as set out in the Standards for Maintenance of New Automotive Vehicles, incorporated herein as Schedule 1."

The Standards for Maintenance in Schedule 1 correspond with those of the Revised Price Schedule 85 issued by the Office of Price Administration.

### Footwear (Conservation Order M-217)—

Limits use of steel shanks in footwear to the following gauges:

- 18 gauge—.045 minimum, 50 carbon steel
- 21 gauge—.032 minimum, 50 carbon steel
- 19 gauge—.040 minimum, low carbon or basic steel

### Glass Container and Closure Simplification (Limitation Order L-103; as amended September 12, 1942)—

This order permits the Director General for Operations to issue schedules establishing simplified practices covering designs, weights, sizes, or types of glass containers and closures. Any reference to a specification, or to a finish, or to the letters "G.C.A." in any of these Schedules is to be understood as referring to a specification issued by the Glass Container Association of America and in effect on May 11, 1942. The amendments in this edition of the Order permit the manufacture of non-standard bottles for export to United States possessions, and include in the Order a series of 28 exhibits of standard food bottles which will become effective for various products as soon as the appropriate schedules are issued. Five of these were made standard for jellies and preserves under one of the schedules issued September 12, but the entire series has been included in the order to encourage food packers to use standardized bottles wherever possible.

Schedules A through D have already been included in this order. Schedule A sets up simplification schedules for glass containers for distilled spirits; Schedule B for malt beverages; Schedule C for preserves and jelly; and Schedule D for wines. Home canning jars for preserves and jelly are not included in the order. Manufacture of molds not conforming to the specifications for the established standard containers is prohibited.

### Incandescent, Fluorescent, and Other Electric Discharge Lamps (Supplementary General Limitation Order L-28-a)—

This simplification order reduces the number of types of bulbs which may now be made from 3500 to 1700, by eliminating almost 2000 lamps of varying voltage, wattage, color, and other construction specifications. It eliminates some types of bulbs in all categories of incandescent, fluorescent, and glow discharge lamps, including household bulbs, industrial lamps, search lights, railroad signal lamps, auto headlights, beacons, and a long list of other types. It does not, however, cut down the total production of electric bulbs. Three general principles guided the selection: (1) Primarily, those bulbs for which suitable substitutes are available will no longer be made; (2) Lamps for which there is no essential demand are now discontinued; (3) Lamps which had been made in a great variety of different voltages and wattages are now simplified so that only a fraction of the

previously made types will be required. For example, the common household electric light bulb previously made in voltages of 110, 115, 120, 125, and 130 will now be made only in the 115, 120, and 125-volt types. These types have proven satisfactory for most household uses, the WPB declares, since the average urban home is supplied with electric power of between 115 and 120 volts. Likewise, 50 watt and 75 watt lamps will no longer be made because lamps in wattages of 15, 25, 40, 60, and 100 are satisfactory.



Specifications for the lamps which may now be produced are given in a schedule appended to the order. The only exceptions to the specifications are lamps designed for diagnostic and surgical purposes and those produced for the Army, Navy, Maritime Commission, War Shipping Administration, and Lend-Lease purposes. Even lamps for military uses cannot be made, however, if any type listed on the schedule can serve the same purpose. The order also restricts the production of lamp parts. After November 1, no part may be made which cannot be used in lamps conforming to the specifications listed in the schedule. Other sections prohibit the production of phosphor coatings containing beryllium or cadmium, glow discharge lamps for non-essential purposes, and the etching, coating, or making of bulbs for private accounts.

The order is expected to result in considerable savings in materials, man-power, manufacturing facilities, and storage space. It is estimated that 7 per cent of the materials now consumed will be saved. This will include 650 tons of steel, 35,000 pounds of solder, and 8,000 pounds of tungsten. Approximately 1,300,000 manhours of direct labor will be released for production of radio vacuum tubes and other war products. About 325,000 square feet of floor space will be made available for production of radio tubes and other electronic devices for the Army and Navy, the WPB estimates, plus about 400,000 additional square feet in warehouse space.

#### **Industrial and Commercial Refrigeration and Air Conditioning Machinery and Equipment (Required Specifications Schedule III to Limitation Order L-126)—Coil or Tube Assemblies for Refrigeration Condensers or Coolers—**

Establishes required specifications for coil or tube assemblies for condensers or coolers, and limits the wall thickness of the tubing and the amount of non-ferrous metals permitted for each type.

#### **Metal Doors, Metal Door Frames and Metal Shutters (Limitation Order L-142)—**

Prohibits the manufacture of metal doors, except metal doors for fire protection purposes. These latter are permitted if constructed of ferrous metal which does not exceed Number 24, U.S. standard gauge. The total weight of the metal must not exceed by more than ten per cent the minimum total weight of metal called for by the specifications of the National Board of Fire Underwriters for the lightest weight metal door permitted for fire protection purposes for the site in question.

#### **Plumbing and Heating Simplification (Amendment 3 to Schedule II to Limitation Order L-42)—**

Adds a simplified list of Reducing Tees, Reducing Crosses, Reducers-Eccentric, and Bushings-Eccentric to Schedule II.

#### **Portable Electric Fans (General Limitation Order L-176)—**

Defines a "Victory model fan" as a fan manufactured or assembled in accordance with Emergency Alternate Federal Specification E-W-F-101a, issued March 9, 1942. No portable fans are to be manufactured. Victory model fans have, however, be made to fulfill purchase orders placed prior to August 1, 1942, by the Procurement Division of the Treasury Department. Portable fans may also be manufactured or assembled in accordance with Specifications 17-F6E or 17-F9C, issued by the Navy Department, or Specification No. 17MC-5, issued by the United States Maritime Commission for use on combat or other maritime vessels.

#### **Rubber and Balata and Products and Materials of which Rubber or Balata Is a Component (Amendment 12 to Supplementary Order M-15-b)—**

Provides a standard definition for a "Repairable Tire" and "Treadable Tire" and specifies the requirements which such a tire must meet.

#### **(Amendment 14 to Supplementary Order M-15-b-1) List 7. Specifications for the manufacture of compounds for the manufacture of tires, tire casings, camelback, capping stock, and tire and tube repair materials.—**

This revised List 7 sets forth the specifications to be used in the manufacture of tires, tire casings, camelback, capping stock and tire and tube repair materials and is intended to furnish standards for the grades of compounds listed.

List 9—Specifications for the manufacture of tires and tire casings (except airplane and bicycle tires)—Confines production of tires and tire casings (except airplane and bicycle tires) to the sizes, plies, and tread types listed, or others as permitted by special authorization of the Director General for Operations. The friction and the tread are to be made from the grade of compound given in List 7 as specified in List 9.

List 10—Specifies sizes and maximum material volume which may be manufactured for passenger automobile, truck, and agricultural implement tire tubes for all orders, including war orders.



#### **(Amendment 15 to Supplementary Order M-15-b-1)—**

Gives specifications for the manufacture of rubber-covered rolls, except washing machine wringers, printer, finger print, and business machines. Gives crude rubber and total RHC content in the different grades of rubber compounds, and gives total SRV (total synthetic rubber expressed on a volume basis) for different grades of synthetic rubber compounds. Also specifies maximum



cover thickness in inches for the different types of rubber-covered rolls.

#### **Men's and Boys' Apparel for Masculine Lounging Wear and Certain Other Garments (General Limitation Order L-130)—**

Provides maximum measurements for length, sweep, and hem for men's and boys' robes and beachcoats.

#### **Materials Entering into the Production of Replacement Storage Batteries for Passenger Automobiles and Light Trucks, Medium and Heavy Trucks, Truck Tractors, Truck Trailers, Passenger Carriers, and Off-the-Highway Motor Vehicles (Limitation Order L-180)—**

Provides production standards based on ampere hour capacity and container sizes for the limited number of storage batteries which the order provides may now be produced for replacements in passenger cars, trucks, buses, and other vehicles. Special sizes may be produced under certain conditions, but it is estimated that the restrictions on size will reduce the number of stock sizes of batteries from about 100 to 17.

#### **Shearlings and Other Wool Skins (Amendment I to General Conservation Order M-94)—**

Defines shearling as the skin of sheep or lamb of 46's grade or higher, having a wool growth of 2 in. or less, or originally of a wool length in excess of 2 in.

#### **Tin (Amendment I to Conservation Order M-43-a, as amended June 5, 1942)—**

Permits solder having a tin content of not more than 40 per cent of weight to be manufactured or used for the repair of gas meters; and wiping solder having a tin content of not more than 38 per cent by weight for the installation or repair of lead water service pipes operated by a public utility. Prohibits manufacture or use of any solder having a tin content of more than 30 per cent of weight for any other purpose.

#### **Zinc (Conservation Order M-11-b)—**

Prohibits the use of zinc in the manufacture of certain items. Defines "Prime western zinc" as zinc of no higher grade than that conforming to American Society for Testing Materials' Specification B6-37, grade 5, and zinc dust for Sheradizing. Also uses the term "zinc of any other grade" as zinc conforming to "American Society for Testing Materials" specification B6-37, grades 1a, 1, 2, 3, or 4, and any alloy in the composition of which the percentage of zinc metal by weight equals or exceeds the percentage of all other metals.

## **Office of Price Administration**

#### **Aluminum (Revised Price Schedule 2, as Amended) Aluminum Scrap and Secondary Aluminum Ingot—**

Defines grades of Aluminum Scrap and Secondary aluminum ingot and sets prices for each grade.

#### **Apparel (Maximum Price Regulation 221) Manufacturers' Prices Fall and Winter Knitted Underwear—**

Defines "same garments" as of the same specific classification and size as provided by Commercial Standard CS33-32, and as having the same average finished weight for comparable size within a tolerance of 3 per cent.

#### **Batting, Padding, Wadding, and Upholstery Filling (Maximum Price Regulation 190)—Free Cotton Linters—**

Sets prices of free cotton linters on the basis of official standards of the United States Government as described in Service and Regulatory Announcement 94 of the United States Department of Agriculture.

#### **Food and Food Products (Amendment No. 3 to Revised Price Schedule No. 50) Green Coffee—**

Sets maximum prices for approximately 200 grades and types of green coffee.

#### **Fresh, Cured, and Canned Meat and Fish (Amendment 5 to Maximum Price Regulation 169) Beef and Veal Carcasses and Wholesale Cuts—**

As a result of its campaign against "upgrading" of beef and veal, this order provides that grading of "choice" cuts must be done under the supervision of the U.S. Department of Agriculture. Under the original regulation grades similar to the Department of Agriculture's

grades were adopted by the OPA but packers were permitted to do their own grading. "However," declares the OPA press release describing Amendment 5, "in recent months of short beef supply, buyers have encountered an enormously increased percentage of the total output privately marked by packers as choice Grade AA, which is the highest priced grade. Such increased volume in the top grades represents upgrading in which purchasers—eager to secure supplies regardless of price—have acquiesced." Under Amendment 5 the choice grade now must be inspected by the Department of Agriculture's graders. "It is expected," OPA states, "that this requirement will go far towards checking such flagrant abuses as have been prevalent during the past few months. However, OPA is prepared to take further action on other grades if it should prove necessary."

#### **Household Furniture (Maximum Price Regulation 213) Coil and Flat Bedsprings with Non-Steel Frames—**

Specifies four "war models" of wood-frame coil bedsprings and establishes maximum prices for the guidance of both manufacturers and retailers. Structural details are given for these four models, covering such items as the number and type of coils, size of wire, wood used in frame, and type of finish. The four "war model" bedsprings are:

- Class A Single deck coil, crimp wire tie
- " B Single deck coil, helical tie
- " C Semidouble deck coil, helical tie
- " D Double deck coil

Specifications for manufacture of each type of bed-spring include the number and type of coils; gauge and kind of coil wire; top assembly; gauge and kind of border wire; frame; frame finish; and weight of wire. The specifications included in the order are for the full size 4 ft 6 in. bed-spring. Other widths are to conform to the above specifications except for the number of coils, weight of wire, and number of steel bands in a platform top.



### Apparel (Maximum Price Regulation 208) Staple Work Clothing—

Defines the "same" garment for purposes of this price regulation. Also declares that a simplified model of any garment shall be considered the same as such garment before simplification except when such simplified garment becomes the same as a lower priced garment sold during March 1942. Lists the simplifications permitted in each type of work garment covered in the regulation.



### Iron and Steel (Amendment 7 to Revised Price Schedule 49) Resale of Iron or Steel Products—

Extends the price schedule to those alloy steels for which specifications were not used in production by mills on April 16, 1941. Examples of such specifications are the National Emergency Specifications and American Iron and Steel Institute Specifications of alloy grades, but not including carbon steel or tool steel grades.

### Lumber Distribution (Maximum Price Regulation 215) Distribution Yard Sales of Softwood—

Extends the requirements for sales of lumber, including regulations against falsely or wrongly grading lumber, to softwood lumber sold out of the seller's stock and not from a mill.

### Motor Vehicles and Motor Vehicle Equipment (Amendment 4 to Revised Price Schedule 85) New Passenger Automobiles—

Provides standards for maintenance of new passenger automobiles while in storage and up to the time they are sold. The price which may be charged for the automobile depends upon whether this standard maintenance has been given. The standards are identical with those in Schedule 1 of the War Production Board's Conservation Order M-216.

### Northeastern Softwood Lumber (Maximum Price Regulation 219)—

Prohibits falsely or wrongly grading or invoicing lumber, or grading as a special grade lumber which can be graded as a standard grade.

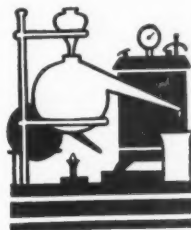
Specifies that grade terms used in the Order have the meanings set forth in "Standard Grading Rules for Northern White Pine and Norway Pine" (Northeastern Type) published by the Northeastern Lumber Manufacturers Association, Inc.

### Wool (Amendment 4 to Maximum Price Regulation 163) Woolen and Worsted Civilian Apparel Fabrics—

Defines "similar fabrics" and provides a new method for pricing for use by manufacturers of woolens and worsted goods for civilian apparel. A "similar fabric" is one which is used for the same purpose as another fabric, and is regarded as a satisfactory substitute for it, affords fairly equivalent serviceability, has approximately the same "handle," finish and appearance, and belongs to the same classification, except that a fabric in which the blend contains other than woolen fibers shall not be deemed "similar" to a fabric in which the blend is made entirely of woolen fibers. The order also lists certain elements of construction and provides that a "similar" fabric may not vary more than a permitted per cent in each one of these elements from the original fabric.

### Fine Chemicals and Drugs (Maximum Price Regulation 203) Vitamin A Natural Oils and Concentrates—

Defines "Vitamin A natural oil" and "Vitamin A concentrate". "Vitamin A natural oil" means any unconcentrated fish or marine animal oil or fish or marine animal liver oil containing more than 6,000 and less than 200,000 USP units of Vitamin A per gram, with the exception of cod liver oil. Vitamin A natural oils containing 200,000 or more USP units of Vitamin A per gram, and blends of a concentrate and an edible vegetable oil, shall be considered concentrates. Sets prices for Vitamin A of different potency, and for Vitamin A concentrate.



### Textile Fabrics; Cotton, Wool, Silk, Synthetics, and Admixtures (Amendment 10 to Maximum Price Regulation 118) Cotton Products—

Describes and sets prices for different types of cotton cloth. Specifies style, size, and weave.

## ASA Library Offers Reference Service On Aircraft Standards

The National Aircraft Standards, which have been approved by both the Eastern and Western Divisions of the National Aircraft Standards Committee for use in manufacture of planes, are now available for reference in the Library of the American Standards Association. These standards apply to the parts and fittings of airplanes. Standards for the materials used in aircraft manufacture are prepared under the juris-

diction of the Society of Automotive Engineers.

These National Aircraft Standards cover such subjects as bolts and nuts, screws, de-icers, flappers, surface roughness designation and conversion tables, bolt-close tolerance, and rod assemblies.

Members of the American Standards Association may refer to the National Aircraft Standards in the ASA Library.

## Higher Unit Stresses Will Help Conserve Steel

National emergency specifications for the design, fabrication, and erection of structural steel for buildings were established by the War Production Board September 10. The specifications were prepared under the authority of WPB Directive No. 8 which orders that a manual of specifications shall govern the use of structural steel for all buildings constructed, financed, or approved by governmental agencies on contracts placed after November 9. The manual was developed under the direction of the Specifications Branch of the Conservation Division.

The purpose of the directive is to conserve the supply of structural steel by requiring the use of higher design unit stresses than are normally used in the design of structural steel for buildings. By using the higher unit stresses, somewhat lighter sections of beams and other members entering into the construction of buildings will be permitted but not to an extent that in any way endangers the safety of the building, the WPB explains. The allowable stress for beams in flexure has been increased from previous allowances ranging from 16,000 to 20,000 pounds per square inch to a mandatory 24,000 pounds per square inch. Other savings of steel are effected through the use of continuity in design and welded fabrication.

It is estimated that the use of these specifications will result in a saving of approximately 10 per cent of the weight of structural steel entering

into building construction. The actual tonnage of steel saved, of course, depends on the amount of future construction. Some quantitative measure of the saving is indicated by the statistics for 1941 which show that approximately two million tons of structural steel were used in the construction of buildings in that year.

The specifications manual is binding upon WPB, the Army, Navy, Maritime Commission, Reconstruction Finance Corporation, the National Housing Agency, and all other Government departments and agencies in respect to war construction and the financing of war construction.

Recommendations for the first draft for the specifications were drawn up by ASA Committee A57 on Building Code Requirements for Iron and Steel, in response to a request from the Conservation Division. This request was received by the ASA on March 3, 1942. Following a special meeting of Committee A57, recommendations were transmitted to the War Production Board on March 27. Engineers representing several Government agencies then held meetings and made additional recommendations and modifications in the proposed specifications, before they were finally adopted by the Specifications Branch and coordinated into the new manual.

Copies of the new specifications may be obtained from the War Production Board or from the American Institute of Steel Construction, 101 Park Avenue, New York City.

## ASA Standards Activities

**Standard Approved Since Our September Issue**  
Pipe Threads B2.1-1942

### Standards Being Considered by ASA for Approval

Cast-Iron Pipe Flanges and Flanged Fittings, Class 250 (Revision of B16b-1928)  
Coal Mines, Rock Dusting to Prevent Coal Dust Explosion (Reaffirmation of M13-1925)  
Code for Pressure Piping (Revision of B31.1-1935)  
Cold-Rolled Strip Steel (ASTM A109-38) G47  
Colored Textiles, Fastness L14  
Cranes, Derricks, and Hoists, Safety Code B30  
Electrical Insulating Materials  
Laminated Round Rods Used in Electrical Insulation (ASTM D349-39) C59.15  
Laminated Tubes Used in Electrical Insulation (ASTM D348-39) C59.14  
Sheet Plate Materials Used in Electrical Insulation (ASTM C229-39) C59.13  
Gas Burning Appliances  
Domestic Gas Ranges Revision of Z21.1-1940  
Gas Space Heaters Revision of Z21.11-1940  
Gas-Fired Duct Furnaces Revision of Z21.34  
Gas Floor Furnaces (CS99-42)

### Standards Being Considered—(Continued)

Gypsum  
Gypsum Lath (ASTM C37-40) Revision of A67.1-1941  
Gypsum Wall Board (ASTM C36-34) Revision of A69.1-1941  
Gypsum Sheathing Board (ASTM C79-34) Revision of A68.1-1941  
Test for Gypsum and Gypsum Products (ASTM C26-40) Revision of A70.1-1941  
Identification Markings of Compressed Gas Cylinders, Proposed Standardization  
Keyways for Holes in Gears B6.4  
Lime  
Limestone, Quicklime, and Hydrated Lime, Methods of Chemical Analysis of (ASTM C25-29)  
Quicklime for Structural Purposes, Specifications for (ASTM C5-26)  
Metal-Cleaning Sanitation, Code of Recommended Good Practices  
Petroleum Products and Lubricants  
Test for Carbon, Residue of Petroleum Products (Ramsbottom Carbon Residue) (ASTM D524-42)  
Test for Flash Point by Means of the Pensky-Martens Closed Tester (ASTM D93-40) Revision of Z11.7-1940  
Test for Gum Content of Gasoline (ASTM D381-36) Revision of Z11.36-1936

## Petroleum Products—(Continued)

- Test for Melting Point of Paraffin Wax (ASTM D87-37) Revision of Z11.4-1937  
 Test for Tetraethyl Lead in Gasoline (ASTM D526-42)  
 Test for Vapor Pressure of Petroleum Products (Reid Method) (ASTM D323-41) Revision of Z11.4-1941  
 Power-Operated Radio Receiving Appliances (UL 6th ed) (Revision of C65-1938)  
 Protection of Structures Containing Inflammable Liquids and Gases—Part 3 of Code for Protection Against Lightning (From status as American Tentative Standard to American Standard) C5, Part 3  
 Radio  
 Recommended Practices for Loudspeaker Testing C16.4  
 Recommended Practices for Volume Measurement of Electrical Speech and Program Waves C16.5  
 Rotating Electrical Machinery on Railway Locomotives and Rail Cars and Trolley, Gasoline-Electric and Oil-Electric Coaches (Revision of C35-1936) C35  
 Sampling and Analysis of Coal and Coke Revision of K18-1940  
 Steel for Bridges and Buildings (ASTM A7-39) Revision of American Standard G24-1939  
 Structural Steel for Locomotives and Cars (ASTM A113-39) Revision of American Standard C39.1-1942  
 Transformers  
 Guides for Operation of Transformers C57.3  
 Test Code for Transformers, Regulators and Reactors C57.2  
 Transformers, Regulators and Reactors C57.1  
 Weather-Resistant (Weatherproof) Wire and Cable, URC Type (Revision of C8.18-1936)

## Standards Submitted for Consideration Since Our September Issue

- Electrical Insulating Materials  
 Testing Molded Materials Used for Electrical Insulating (ASTM D48-39) C59.1-1940  
 Test for Impact Resistance of Electrical Insulating Materials (ASTM D256-38) C59.11-1941  
 Graphical Symbols for Telephone, Telegraph and Radio Use Z32.5  
 Measurement of Test Voltage in Dielectric Tests C68.1  
 Threaded Cast-Iron Pipe for Drainage, Vent, and Waste Services  
 Welding Symbols and Instructions for Their Use Z32.1

## American War Standards

### Standards Approved and Published

- Accuracy of Engine Lathes B5.16-1941 25¢  
 Allowable Concentration of Cadmium Z37.5-1941 20¢  
 Color, Specification and Description of Z44-1942 25¢

## War Standards Approved and Published—(Continued)

- Domestic Gas Ranges, Approval Requirements Z21.1ES-1942 \$1.00  
 Gas Water Heaters, Approval Requirements Z21.10WS-1942 \$1.00  
 Machine Tool Electrical Standards C74-1942 40¢  
 Manganese, Allowable Concentration of Z37.6-1942 20¢  
 Photographic Exposure Computer Z38.2-1942 \$1.00  
 Quality Control  
 Guide for Quality Control Z1.1-1941 } In one  
 Control Chart Method of Analyzing Data } Volume  
 Z1.2-1941 } 75¢  
 Control Chart Method of Controlling Quality During Production Z1.3-1942 75¢

## Standards Under Way

- Allowable Concentration of Ether Z37  
 Allowable Concentration of Xylene Z37  
 Allowable Concentration of Xylol Z37  
 Class 125 Cast-Iron Flanged Fittings B16a  
 Color Fastness of Textiles, Terminology L14  
 Electrical Indicating Instruments  
 Military Radio Equipment and Parts C75:  
 1. Insulating materials  
     (a) Steatite  
     (b) Plastics  
     (c) Others  
 2. Insulating Forms  
     (a) Steatite  
     (b) Plastics  
     (c) Others  
 3. Capacitors—Fixed  
     (a) Mica  
     (b) Paper  
     (c) Electrolytic  
     (d) Ceramic  
 4. Capacitors—Variable  
     (a) Receiver  
     (b) Transmitter  
     (c) Trimmer  
 5. Dynamotors and Similar Power Units  
 6. Crystals and Holders  
 7. Resistors—Fixed  
     (a) Composition  
     (b) Wire Wound  
 8. Resistors—Variable  
     (a) Composition  
     (b) Wire Wound  
 9. Transformers  
     (a) Power  
     (b) Audio Frequency  
     (c) Radio Frequency  
 10. Tube Sockets  
     (a) Receiving  
     (b) Transmitting  
     (c) Cathode Ray  
 11. Connectors  
     (a) Telephone Plugs and Jacks  
     (b) Multicon-tact Plugs and Receptacles  
 12. Dry Batteries  
     (a) Single Cell  
     (b) Multicell  
 13. Vibrator Power Supplies

- Packages for Electronic Tubes Z45  
 Pressure-Temperature Ratings for Steel Pipe Flanges and Flanged Fittings B16e5  
 Protective Lighting of Industrial Plants A85  
 Protective Occupational Footwear  
 Screw Threads for Alloy-Steel Bolting B1.4

## New Book Contains Standards For Highway Materials

The American Association of State Highway Officials has recently published the latest, revised edition of *Standard Specifications for Highway Materials and Methods of Sampling and Testing*. The two-volume book, which is the fourth edition, contains 102 specifications and 103 methods of sampling and testing, an increase of 36 per cent as compared with the 1938 edition.

Applicable standards of the American Standards Association and the American Society for Testing Materials were used in the development

of the specifications and tests. The materials covered are bituminous materials, aggregates, brick, culvert and sewer pipe, bridge paints, reinforcing steel and wire rope, and metallic materials for bridges. The methods of sampling and testing apply to Portland cement, bituminous materials, soils, aggregates, concrete, brick and metallic materials.

Both volumes are available from the Association, 1220 National Press Building, Washington, D. C., for \$4.50.

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